

**DENON**  
*PROFESSIONAL*

AV SURROUND PREAMPLIFIER

**DN-500AV**

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Owner's Manual



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



**CAUTION:**

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**CAUTION:**

**USE OF CONTROLS OR ADJUSTMENTS OR REFORMATION OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

**IMPORTANT TO SAFETY**

**WARNING:**

**To reduce the risk of fire and electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.**

**CAUTION**

**1. Handle the power supply cord carefully**

Do not damage or deform the power supply cord. If it is damaged or deformed, it may cause electric shock or malfunction when used. When removing from wall outlet, be sure to remove by holding the plug attachment and not by pulling the cord.

**2. Do not open the rear cover**

In order to prevent electric shock, do not open the top cover. If problems occur, contact your DENON DEALER.

**3. Do not place anything inside**

Do not place metal objects or spill liquid inside the system. Electric shock or malfunction may result.

Please, record and retain the Model name and serial number of your set shown on the rating label.

Model No. DN-500AV

Serial No. \_\_\_\_\_

**FCC INFORMATION**  
**(For US customers)**

**1. COMPLIANCE INFORMATION**

**Product Name: AV Surround Preamp**

**Model Number: This unit**

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

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 Tel. 630-741-0330

**2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT**

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

**3. IMPORTANT**

When connecting this product to network hub or router, use only a shielded STP or ScTP LAN cable which is available at retailer. Follow all installation instructions. Failure to follow instructions could void your authority, granted by the FCC, to use the product.

**4. NOTE**

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

For Canadian customers:

This Class B apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# IMPORTANT SAFETY INSTRUCTIONS

## READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
16. This product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin.  
This plug will only fit into a grounding-type power outlet.  
If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.



### CAUTION:

**(English)**

To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.  
The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.  
Do not expose batteries to excessive heat such as sunshine, fire or the like.

### VORSICHT:

**(Deutsch)**

Um dieses Gerät vollständig von der Stromversorgung abzutrennen, trennen Sie bitte den Netzstecker von der Wandsteckdose ab.  
Die Hauptstecker werden verwendet, um die Stromversorgung zum Gerät völlig zu unterbrechen; er muss für den Benutzer gut und einfach zu erreichen sein.  
Setzen Sie Batterien nicht übermäßiger Wärme aus, z. B. Sonnenstrahlung, Feuer oder dergleichen.

### PRECAUTION:

**(Français)**

Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale.  
La prise secteur est utilisée pour couper complètement l'alimentation de l'appareil et l'utilisateur doit pouvoir y accéder facilement.  
N'exposez pas les batteries à une chaleur excessive telle que le soleil, le feu ou autre.

### ATTENZIONE:

**(Italiano)**

Per scollegare definitivamente questo prodotto dalla rete di alimentazione elettrica, togliere la spina dalla relativa presa.  
La spina di rete viene utilizzata per interrompere completamente l'alimentazione all'unità e deve essere facilmente accessibile all'utente.  
Non esporre le batterie a un calore eccessivo, per esempio al sole, al fuoco o altre fonti.

### PRECAUCIÓN:

**(Español)**

Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared.  
El enchufe de la alimentación se utiliza para interrumpir por completo el suministro de alimentación a la unidad y debe de encontrarse en un lugar al que el usuario tenga fácil acceso.  
No exponga las pilas a calor excesivo, como a la luz solar, el fuego, etc.

### VOORZICHTIGHEID:

**(Nederlands)**

Om de voeding van dit product volledig te onderbreken moet de stekker uit het stopcontact worden getrokken.  
De netstekker wordt gebruikt om de stroomtoevoer naar het toestel volledig te onderbreken en moet voor de gebruiker gemakkelijk bereikbaar zijn.  
Stel de batterijen niet bloot aan felle zonneschijn, brand, enzovoorts.

### FÖRSIKTIHETSMÅTT:

**(Svenska)**

Koppla loss stickproppen från eluttaget för att helt skilja produkten från nätet.  
Stickproppen används för att helt bryta strömförsörjningen till apparaten, och den måste vara lättillgänglig för användaren.  
Utsätt inte batterierna för stark hetta såsom solsken, eld eller liknande.

### ATENÇÃO:

**(Português)**

Para desligar completamente este produto da corrente, desligue a ficha da tomada eléctrica.  
A ficha eléctrica é utilizada para interromper completamente a alimentação da unidade e deve estar num local onde o utilizador lhe possa aceder facilmente.  
Não exponha as pilhas a fontes de calor excessivo, como luz solar, fogo ou semelhantes.

**☐ NOTE ON USE / HINWEISE ZUM GEBRAUCH / OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO / NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA / NOTA SOBRE UTILIZAÇÃO**

WARNINGS	WARNHINWEISE	AVERTISSEMENTS	AVVERTENZE	ADVERTENCIAS	WAARSCHUWINGEN	VARNINGAR	AVISOS
<ul style="list-style-type: none"> <li>• Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack.</li> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Keep the unit free from moisture, water, and dust.</li> <li>• Unplug the power cord when not using the unit for long periods of time.</li> <li>• Do not obstruct the ventilation holes.</li> <li>• Do not let foreign objects into the unit.</li> <li>• Do not let insecticides, benzene, and thinner come in contact with the unit.</li> <li>• Never disassemble or modify the unit in any way.</li> <li>• Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths or curtains.</li> <li>• Naked flame sources such as lighted candles should not be placed on the unit.</li> <li>• Observe and follow local regulations regarding battery disposal.</li> <li>• Do not expose the unit to dripping or splashing fluids.</li> <li>• Do not place objects filled with liquids, such as vases, on the unit.</li> <li>• Do not handle the mains cord with wet hands.</li> <li>• When the switch is in the OFF (STANDBY) position, the equipment is not completely switched off from MAINS.</li> <li>• The equipment shall be installed near the power supply so that the power supply is easily accessible.</li> </ul>	<ul style="list-style-type: none"> <li>• Vermeiden Sie hohe Temperaturen. Beachten Sie, dass eine ausreichende Belüftung gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.</li> <li>• Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>• Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.</li> <li>• Wenn das Gerät längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.</li> <li>• Decken Sie den Lüftungsbereich nicht ab.</li> <li>• Lassen Sie keine fremden Gegenstände in das Gerät kommen.</li> <li>• Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.</li> <li>• Versuchen Sie niemals das Gerät auseinander zu nehmen oder zu verändern.</li> <li>• Die Belüftung sollte auf keinen Fall durch das Abdecken der Belüftungsöffnungen durch Gegenstände wie beispielsweise Zeitungen, Tischtücher, Vorhänge o. Ä. behindert werden.</li> <li>• Auf dem Gerät sollten keinerlei direkte Feuerquellen wie beispielsweise angezündete Kerzen aufgestellt werden.</li> <li>• Bitte beachten Sie bei der Entsorgung der Batterien die örtlich geltenden Umweltbestimmungen.</li> <li>• Das Gerät sollte keiner tropfenden oder spritzenden Flüssigkeit ausgesetzt werden.</li> <li>• Auf dem Gerät sollten keine mit Flüssigkeit gefüllten Behälter wie beispielsweise Vasen aufgestellt werden.</li> <li>• Das Netzkabel nicht mit feuchten oder nassen Händen anfassen.</li> <li>• Wenn der Schalter ausgeschaltet ist (OFF (STANDBY)-Position), ist das Gerät nicht vollständig vom Stromnetz (MAINS) abgetrennt.</li> <li>• Das Gerät sollte in der Nähe einer Netzsteckdose aufgestellt werden, damit es leicht an das Stromnetz angeschlossen werden kann.</li> </ul>	<ul style="list-style-type: none"> <li>• Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.</li> <li>• Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>• Protéger l'appareil contre l'humidité, l'eau et la poussière.</li> <li>• Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.</li> <li>• Ne pas obstruer les trous d'aération.</li> <li>• Ne pas laisser des objets étrangers dans l'appareil.</li> <li>• Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.</li> <li>• Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.</li> <li>• Ne pas recouvrir les orifices de ventilation avec des objets tels que des journaux, nappes ou rideaux. Cela entraverait la ventilation.</li> <li>• Ne jamais placer de flamme nue sur l'appareil, notamment des bougies allumées.</li> <li>• Veillez à respecter les lois en vigueur lorsque vous jetez les piles usagées.</li> <li>• L'appareil ne doit pas être exposé à l'eau ou à l'humidité.</li> <li>• Ne pas poser d'objet contenant du liquide, par exemple un vase, sur l'appareil.</li> <li>• Ne pas manipuler le cordon d'alimentation avec les mains mouillées.</li> <li>• Lorsque l'interrupteur est sur la position OFF (STANDBY), l'appareil n'est pas complètement déconnecté du SECTEUR (MAINS).</li> <li>• L'appareil sera installé près de la source d'alimentation, de sorte que cette dernière soit facilement accessible.</li> </ul>	<ul style="list-style-type: none"> <li>• Evitate di esporre l'unità a temperature elevate. Assicuratevi che vi sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.</li> <li>• Maneggiate il cavo di alimentazione con attenzione. Tenete ferma la spina quando scollegate il cavo dalla presa.</li> <li>• Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.</li> <li>• Scollegate il cavo di alimentazione quando prevedete di non utilizzare l'unità per un lungo periodo di tempo.</li> <li>• Non coprite i fori di ventilazione.</li> <li>• Non inserite corpi estranei all'interno dell'unità.</li> <li>• Assicuratevi che l'unità non entri in contatto con insetticidi, benzolo o solventi.</li> <li>• Non smontate né modificate l'unità in alcun modo.</li> <li>• Le aperture di ventilazione non devono essere ostruite coprendole con oggetti, quali giornali, tovaglie, tende e così via.</li> <li>• Non posizionate sull'unità fiamme libere, come ad esempio candele accese.</li> <li>• Prestate attenzione agli aspetti legati alla tutela dell'ambiente nello smaltimento delle batterie.</li> <li>• L'apparecchiatura non deve essere esposta a gocciolii o spruzzi.</li> <li>• Non posizionate sull'unità alcun oggetto contenente liquidi, come ad esempio i vasi.</li> <li>• Non toccare il cavo di alimentazione con le mani bagnate.</li> <li>• Quando l'interruttore è nella posizione OFF (STANDBY), l'apparecchiatura non è completamente scollegata da MAINS.</li> <li>• L'apparecchio va installato in prossimità della fonte di alimentazione, in modo che quest'ultima sia facilmente accessibile.</li> </ul>	<ul style="list-style-type: none"> <li>• Evite altas temperaturas. Permite la suficiente dispersión del calor cuando está instalado en la consola.</li> <li>• Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.</li> <li>• Mantenga el equipo libre de humedad, agua y polvo.</li> <li>• Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.</li> <li>• No obstruya los orificios de ventilación.</li> <li>• No deje objetos extraños dentro del equipo.</li> <li>• No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.</li> <li>• Nunca desarme o modifique el equipo de ninguna manera.</li> <li>• La ventilación no debe quedar obstruida por haberse cubierto las aperturas con objetos como periódicos, manteles o cortinas.</li> <li>• No deberán colocarse sobre el aparato fuentes inflamables sin protección, como velas encendidas.</li> <li>• A la hora de deshacerse de las pilas, respete la normativa para el cuidado del medio ambiente.</li> <li>• No exponer el aparato al goteo o salpicaduras cuando se utilice.</li> <li>• No colocar sobre el aparato objetos llenos de líquido, como jarros.</li> <li>• No maneje el cable de alimentación con las manos mojadas.</li> <li>• Cuando el interruptor está en la posición OFF (STANDBY), el equipo no está completamente desconectado de la alimentación MAINS.</li> <li>• El equipo se instalará cerca de la fuente de alimentación de manera que resulte fácil acceder a ella.</li> </ul>	<ul style="list-style-type: none"> <li>• Vermijd hoge temperaturen. Zorg er bij installatie in een audiorack voor, dat de door het toestel geproduceerde warmte goed kan worden afgevoerd.</li> <li>• Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.</li> <li>• Laat geen vochtigheid, water of stof in het apparaat binnendringen.</li> <li>• Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt.</li> <li>• De ventilatieopeningen mogen niet worden geblokkeerd.</li> <li>• Laat geen vreemde voorwerpen in dit apparaat vallen.</li> <li>• Voorkom dat insecticiden, benzene of ververf dunner met dit toestel in contact komen.</li> <li>• Dit toestel mag niet gedemonteerd of aangepast worden.</li> <li>• De ventilatie mag niet worden belemmerd door de ventilatieopeningen af te dekken met bijvoorbeeld kranten, een tafelkleed of gordijnen.</li> <li>• Plaats geen open vlammen, bijvoorbeeld een brandende kaars, op het apparaat.</li> <li>• Houd u steeds aan de milieuvorschriften wanneer u gebruikte batterijen wegdoet.</li> <li>• Stel het apparaat niet bloot aan druppels of spatten.</li> <li>• Plaats geen voorwerpen gevuld met water, bijvoorbeeld een vaas, op het apparaat.</li> <li>• Raak het netsnoer niet met natte handen aan.</li> <li>• Als de schakelaar op OFF (STANDBY) staat, is het apparaat niet volledig losgekoppeld van de netspanning (MAINS).</li> <li>• De apparatuur wordt in de buurt van het stopcontact geïnstalleerd, zodat dit altijd gemakkelijk toegankelijk is.</li> </ul>	<ul style="list-style-type: none"> <li>• Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.</li> <li>• Hantera nätkabeln varsamt. Håll i kabeln när den kopplas från el-uttaget.</li> <li>• Utsätt inte apparaten för fukt, vatten och damm.</li> <li>• Koppla loss nätkabeln om apparaten inte kommer att användas i lång tid.</li> <li>• Täpp inte till ventilationsöppningarna.</li> <li>• Se till att främmande föremål inte tränger in i apparaten.</li> <li>• Se till att inte insektsmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje.</li> <li>• Ta inte isär apparaten och försök inte bygga om den.</li> <li>• Ventilationen bör inte förhindras genom att täcka för ventilationsöppningarna med föremål såsom tidningar, bordsdukar eller gardiner.</li> <li>• Placera inte öppen eld, t.ex. tända ljus, på apparaten.</li> <li>• Tänk på miljöaspekterna när du bortskaffar batterier.</li> <li>• Apparaten får inte utsättas för vätska.</li> <li>• Placera inte föremål fyllda med vätska, t.ex. vaser, på apparaten.</li> <li>• Hantera inte nätsladden med våta händer.</li> <li>• Även om strömbrytaren står i det avstängda läget OFF (STANDBY), så är utrustningen inte helt bortkopplad från det elektriska nätet (MAINS).</li> <li>• Utrustningen ska vara installerad nära strömuttaget så att strömförsörjningen är lätt att tillgå.</li> </ul>	<ul style="list-style-type: none"> <li>• Evite temperaturas altas. Assegure uma suficiente dispersão de calor quando a unidade for instalada numa prateleira.</li> <li>• Manuseie o cabo de alimentação com cuidado. Alimente a unidade desligada quando desligar o cabo de alimentação.</li> <li>• Mantenha a unidade afastada da humidade, da água e do pó.</li> <li>• Desligue o cabo de alimentação quando não estiver a utilizar a unidade por longos períodos de tempo.</li> <li>• Não obstrua os orifícios de ventilação.</li> <li>• Não deixe objectos estranhos dentro da unidade.</li> <li>• Não permita que insecticidas, benzina e diluente entrem em contacto com a unidade.</li> <li>• Nunca desmonte ou modifique de alguma forma a unidade.</li> <li>• A ventilação não deve ser obstruída, tapando as aberturas de ventilação com objectos, como jornais, toalhas ou cortinas.</li> <li>• Não devem ser colocadas junto à unidade fontes de chama aberta, como velas acesas.</li> <li>• Respeite as regulamentações locais relativas à eliminação de pilhas.</li> <li>• Não exponha a unidade a gotejamento ou salpicos de líquidos.</li> <li>• Não coloque objectos com líquidos, como jarros, em cima da unidade.</li> <li>• Não manuseie o cabo de alimentação com as mãos molhadas.</li> <li>• Quando o interruptor se encontra na posição OFF (STANDBY), o equipamento não está completamente desligado da REDE ELÉCTRICA.</li> <li>• O equipamento deve ser instalado junto da fonte de alimentação, para que a fonte de alimentação esteja facilmente acessível.</li> </ul>

**•DECLARATION OF CONFORMITY****(English)**

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards:

EN60065, EN55013, EN55020, EN61000-3-2 and EN61000-3-3.

Following the provisions of Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC, the EC regulation 1275/2008 and its frame work Directive 2009/125/EC for Energy-related Products (ErP).

**•ÜBEREINSTIMMUNGSERKLÄRUNG****(Deutsch)**

Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht:

EN60065, EN55013, EN55020, EN61000-3-2 und EN61000-3-3.

Gemäß den Bestimmungen der Niederspannungsrichtlinie 2006/95/EG und EMV Richtlinie 2004/108/EG, der Verordnung (EG) Nr. 1275/2008 der Kommission und deren Rahmenrichtlinie 2009/125/EG zu energieverbrauchsrelevanten Produkten (ErP).

**•DECLARATION DE CONFORMITE****(Français)**

Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants:

EN60065, EN55013, EN55020, EN61000-3-2 et EN61000-3-3.

Selon la directive 2006/95/EC concernant la basse tension et la directive CEM 2004/108/EC, la réglementation européenne 1275/2008 et la directive 2009/125/EC établissant un cadre de travail applicable aux produits liés à l'énergie (ErP).

**•DICHIARAZIONE DI CONFORMITÀ****(Italiano)**

Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative:

EN60065, EN55013, EN55020, EN61000-3-2 e EN61000-3-3.

Facendo seguito alle disposizioni della direttiva sul basso voltaggio 2006/95/EC alla direttiva EMC 2004/108/EC, alla norma EC 1275/2008 e alla relativa legge quadro 2009/125/EC in materia di prodotti alimentati ad energia (ErP).

QUESTO PRODOTTO E' CONFORME

AL D.M. 28/08/95 N. 548

**•DECLARACIÓN DE CONFORMIDAD****(Español)**

Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración, está conforme con los siguientes estándares:

EN60065, EN55013, EN55020, EN61000-3-2 y EN61000-3-3.

De acuerdo con la directiva sobre baja tensión 2006/95/CE y la directiva sobre CEM 2004/108/CE, la normativa CE 1275/2008 y su directiva marco 2009/125/EC para productos relacionados con la energía (ErP).

**•EENVORMIGHEIDSVERKLARING****(Nederlands)**

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit produkt, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen:

EN60065, EN55013, EN55020, EN61000-3-2 en EN61000-3-3.

Volgens de voorzieningen van lage spanningsrichtlijn 2006/95/EC en EMC-richtlijn 2004/108/EC, de EU-richtlijn 1275/2008 en de kaderrichtlijn 2009/125/EC voor energieverbruikende producten (ErP).

**•ÖVERENSSTÄMMELSEINTYG****(Svenska)**

Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder:

EN60065, EN55013, EN55020, EN61000-3-2 och EN61000-3-3.

Uppfyller reglerna i lågspänningsdirektivet 2006/95/EC och EMC-direktivet 2004/108/EC, EU-förordningen 1275/2008 och ramverksdirektivet 2009/125/EC för energirelaterade produkter (ErP).

**•DECLARAÇÃO DE CONFORMIDADE****(Português)**

Declaramos sob nossa exclusiva responsabilidade que este produto, ao qual se refere esta declaração, se encontra em conformidade com as seguintes normas:

EN60065, EN55013, EN55020, EN61000-3-2 e EN61000-3-3.

De acordo com as provisões da Directiva de Baixa Tensão 2006/95/CE e a Directiva CEM 2004/108/CE, o Regulamento (CE) 1275/2008 e a respectiva Directiva-Quadro 2009/125/CE para produtos relacionados com o consumo de energia (ErP).

**D&M Professional Europe**  
**A division of D&M Europe B.V.**  
**Beemdstraat 11**  
**5653 MA Eindhoven**  
**The Netherlands**

#### A NOTE ABOUT RECYCLING:

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations. When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal. This product and the supplied accessories, excluding the batteries, constitute the applicable product according to the WEEE directive.

#### HINWEIS ZUM RECYCLING:

Das Verpackungsmaterial dieses Produktes ist zum Recyceln geeignet und kann wieder verwendet werden. Bitte entsorgen Sie alle Materialien entsprechend der örtlichen Recycling-Vorschriften. Beachten Sie bei der Entsorgung des Gerätes die örtlichen Vorschriften und Bestimmungen. Die Batterien dürfen nicht in den Hausmüll geworfen oder verbrannt werden; bitte entsorgen Sie die Batterien gemäß der örtlichen Vorschriften. Dieses Produkt und das im Lieferumfang enthaltene Zubehör (mit Ausnahme der Batterien!) entsprechen der WEEE-Direktive.

#### UNE REMARQUE CONCERNANT LE RECYCLAGE:

Les matériaux d'emballage de ce produit sont recyclables et peuvent être réutilisés. Veuillez disposer des matériaux conformément aux lois sur le recyclage en vigueur. Lorsque vous mettez cet appareil au rebut, respectez les lois ou réglementations en vigueur. Les piles ne doivent jamais être jetées ou incinérées, mais mises au rebut conformément aux lois en vigueur sur la mise au rebut des piles. Ce produit et les accessoires inclus, à l'exception des piles, sont des produits conformes à la directive DEEE.

#### NOTA RELATIVA AL RICICLAGGIO:

I materiali di imballaggio di questo prodotto sono riutilizzabili e riciclabili. Smaltire i materiali conformemente alle normative locali sul riciclaggio. Per lo smaltimento dell'unità, osservare le normative o le leggi locali in vigore. Non gettare le batterie, né incenerirle, ma smaltirle conformemente alla normativa locale sui rifiuti chimici. Questo prodotto e gli accessori inclusi nell'imballaggio sono applicabili alla direttiva RAEE, ad eccezione delle batterie.

#### ACERCA DEL RECICLAJE:

Los materiales de embalaje de este producto son reciclables y se pueden volver a utilizar. Disponga de estos materiales siguiendo los reglamentos de reciclaje de su localidad. Cuando se deshaga de la unidad, cumpla con las reglas o reglamentos locales. Las pilas nunca deberán tirarse ni incinerarse. Deberá disponer de ellas siguiendo los reglamentos de su localidad relacionados con los desperdicios químicos. Este producto junto con los accesorios empacquetados es el producto aplicable a la directiva RAEE excepto pilas.

#### EEN AANTEKENING MET BETREKKING TOT DE RECYCLING:

Het inpakmateriaal van dit product is recycleerbaar en kan opnieuw gebruikt worden. Er wordt verzocht om zich van elk afvalmateriaal te ontdoen volgens de plaatselijke voorschriften. Volg voor het wegdoen van de speler de voorschriften voor de verwijdering van wit- en bruingoed op. Batterijen mogen nooit worden weggegooid of verbrand, maar moeten volgens de plaatselijke voorschriften betreffende chemisch afval worden verwijderd. Op dit product en de meegeleverde accessoires, m.u.v. de batterijen is de richtlijn voor afgedankte elektrische en elektronische apparaten (WEEE) van toepassing.

#### OBSERVERA ANGÅENDE ÅTERVINNING:

Produktens emballage är återvinningsbart och kan återanvändas. Kassera det enligt lokala återvinningsbestämmelser. När du kasserar enheten ska du göra det i överensstämmelse med lokala regler och bestämmelser. Batterier får absolut inte kastas i soporna eller brännas. Kassera dem enligt lokala bestämmelser för kemiskt avfall. Denna apparat och de tillbehör som levereras med den uppfyller gällande WEEE-direktiv, med undantag av batterierna.

#### UMA NOTA SOBRE A RECICLAGEM:

Os materiais de embalagem deste produto são recicláveis e podem ser reutilizados. Elimine quaisquer materiais de acordo com as normas de reciclagem locais. Quando eliminar a unidade, obedeça às regras ou normas locais. As pilhas nunca devem ser deitadas fora ou incineradas, mas sim eliminadas de acordo com as normas locais relativas aos resíduos químicos. Este produto e os respectivos acessórios embalados em conjunto constituem o produto aplicável de acordo com a directiva WEEE, excepto as pilhas.



Pb

#### CAUTIONS ON INSTALLATION

#### VORSICHTSHINWEISE ZUR AUFSTELLUNG

#### PRÉCAUTIONS D'INSTALLATION

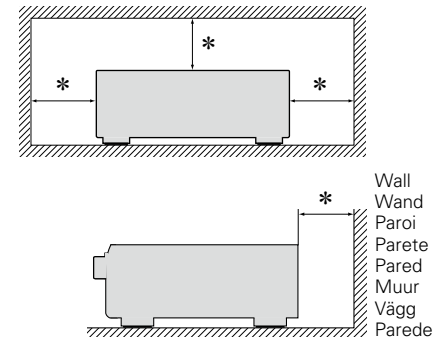
#### PRECAUZIONI SULL'INSTALLAZIONE

#### EMPLAZAMIENTO DE LA INSTALACIÓN

#### VOORZORGSMATREGELEN BIJ DE INSTALLATIE

#### FÖRSIKTIGHET VID INSTALLATIONEN

#### PRECAUÇÕES DE INSTALAÇÃO



- \* **For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.**
  - More than 0.1 m (4 in.) is recommended.
  - Do not place any other equipment on this unit.
- \* **Stellen Sie das Gerät nicht an einem geschlossenen Ort, wie in einem Bücherregal oder einer ähnlichen Einrichtung auf, da dies eine ausreichende Belüftung des Geräts behindern könnte.**
  - Empfohlen wird über 0,1 m.
  - Keine anderen Gegenstände auf das Gerät stellen.
- \* **Pour permettre la dissipation de chaleur requise, n'installez pas cette unité dans un espace confiné tel qu'une bibliothèque ou un endroit similaire.**
  - Une distance de plus de 0,1 m (4 po.) est recommandée.
  - Ne placez aucun matériel sur cet appareil.
- \* **Per una dispersione adeguata del calore, non installare questa apparecchiatura in uno spazio ristretto, come ad esempio una libreria o simili.**
  - Si raccomanda una distanza superiore ai 0,1 m.
  - Non posizionare alcun altro oggetto o dispositivo su questo dispositivo.
- \* **Para la dispersión del calor adecuadamente, no instale este equipo en un lugar confinado tal como una librería o unidad similar.**
  - Se recomienda dejar más de 0,1 m (4 pulg.) alrededor.
  - No coloque ningún otro equipo sobre la unidad.
- \* **Plaats dit toestel niet in een kleine afgesloten ruimte, zoals een boekenkast e.d., omdat anders de warmte niet op gepaste wijze kan worden afgevoerd.**
  - Meer dan 0,1 m is aanbevolen.
  - Plaats geen andere apparatuur op het toestel.
- \* **För att tillförsäkra god värmeavledning får utrustningen inte installeras i instängda utrymmen, som t.ex. en bokhylla eller liknande.**
  - Mer än 0,1 m rekommenderas.
  - Placera ingen annan utrustning ovanpå den här enheten.
- \* **Para uma correcta dispersão do calor, não instale esta unidade num espaço confinado, como uma estante de livros ou uma estrutura semelhante.**
  - São recomendados mais de 0,1 m.
  - Não coloque qualquer outro equipamento sobre esta unidade.

# Getting started

Thank you for purchasing this DENON Professional product. To ensure proper operation, please read this owner's manual carefully before using the product. After reading, be sure to keep the documentation for future reference.

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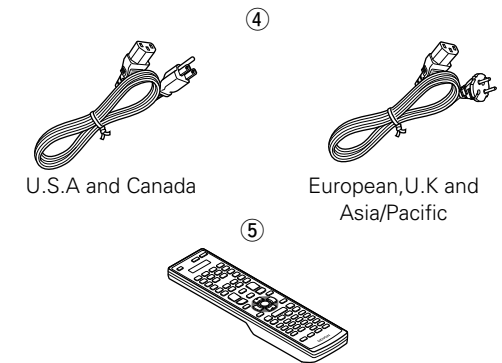
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## Accessories

Check that the following parts are supplied with the product.

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## Features

### Setup wizard, providing easy-to-follow setup instructions

First select the language when prompted. Then simply follow the instructions displayed on the TV screen to set up the language select, network, etc.

### Easy to use, Graphical User Interface

This unit is equipped with an easy to see "Graphical User Interface" that uses menu displays and levels. The use of level displays increases operability of the this unit.

### Direct play for iPod® and iPhone® via USB (👉 page 13)

Music data from an iPod can be played back if you connect the USB cable supplied with the iPod via the USB port of this unit, and also an iPod can be controlled with the remote control unit for this unit. When an iPod is connected, merely pressing **iPod ▶** on the main unit starts playback of music from the iPod.

### Supports HDMI (with 3D, ARC, Deep Color, "x.v.Color", Auto Lip Sync and HDMI control function) (👉 page 7)

This unit can output 3D video signals input from a Blu-ray Disc player to a TV that supports a 3D system. This unit also supports the ARC (Audio Return Channel) function, which reproduces TV sound with this unit via an HDMI cable used for connecting the unit and a TV\*.

\*The TV should support the ARC function.

### 6-HDMI inputs and 1-output

The unit is equipped with 6 HDMI input connectors for connecting devices with HDMI connectors, such as a Blu-ray Disc player, game machine, HD video camera, etc.

### High definition audio support

The unit is equipped with a decoder which supports high-quality digital audio format for Blu-ray Disc players such as Dolby TrueHD, DTS-HD Master Audio, etc.



## Cautions on handling

- **Before turning the power on**

Check once again that all connections are correct and that there are no problems with the connection cables.

- Power is supplied to some of the circuitry even when the unit is set to the standby mode. When going on vacation or leaving home for long periods of time, be sure to unplug the power cord from the power outlet.

- **About condensation**

If there is a major difference in temperature between the inside of the unit and the surroundings, condensation (dew) may form on the operating parts inside the unit, causing the unit not to operate properly.

If this happens, let the unit sit for an hour or two with the power turned off and wait until there is little difference in temperature before using the unit.

- **Cautions on using mobile phones**

Using a mobile phone near this unit may result in noise. If that occurs, move the mobile phone away from this unit when it is in use.

- **Moving the unit**

Turn off the power and unplug the power cord from the power outlet. Next, disconnect the connection cables to other system units before moving the unit.

- **Operable time for continuous use**





This unit can be used continually for up to 24 hours. Continuing to use this unit for longer than 24 hours may result in operations failing to function correctly. To continue use for longer than 24 hours, restart the unit every 24 hours.
































- **About care**

- Wipe the cabinet and control panel clean with a soft cloth.
- Follow the instructions when using a chemical cleaner.
- Benzene, paint thinner or other organic solvents as well as insecticide may cause material changes and discoloration if brought into contact with the unit, and should therefore not be used.

## Basic version

Here, we explain the connections and basic operation methods for this unit.

- **Connections**  [page 5](#)
- **Settings**  [page 18](#)
- **Playback (Basic operation)**  [page 19](#)
- **Selecting a listening mode (Surround mode)**  [page 33](#)

	Connection	 <a href="#">page 6,</a>		Connection	 <a href="#">page 8, 10</a>
	Playback	-		Playback	-
	Connection	 <a href="#">page 8, 11</a>		Connection	 <a href="#">page 8, 11</a>
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For speaker connections, see [page 40](#),  [page 6](#) "Connecting a power amplifier".

# Connections

## Important information

- Make connections as follows before using this unit. Select an appropriate connection type according to the devices to be connected.
- You may need to make some settings on this unit depending on the connection method. Refer to each description for more information.
- Select the cables (sold separately) according to the devices being connected.

### NOTE

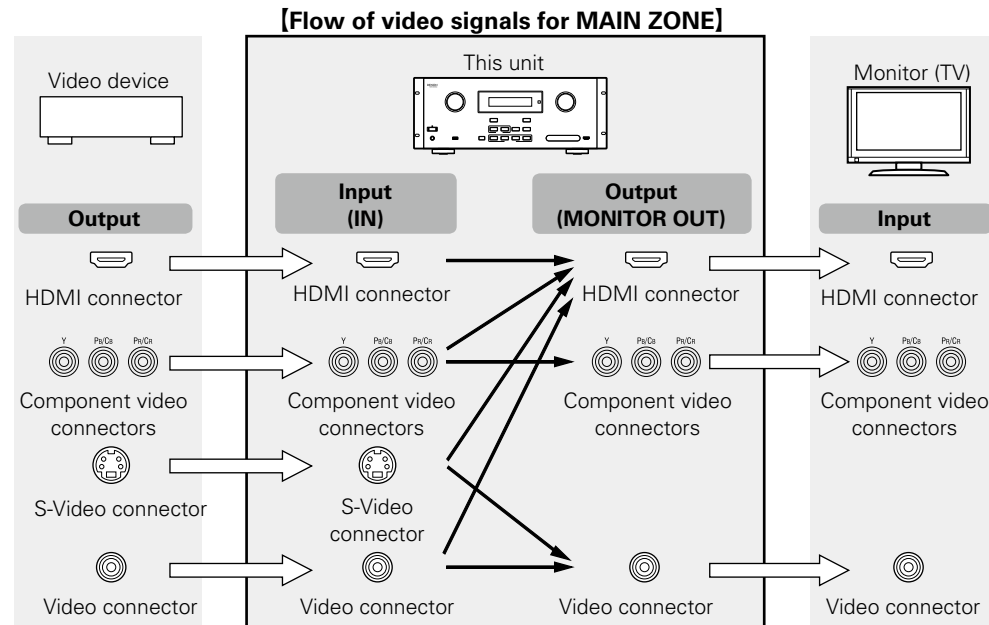
- Do not plug in the power cord until all connections have been completed. When the Setup wizard is running, follow the instructions in the Setup wizard screen for making connections. (Power is not supplied to the input/output terminals while the Setup wizard is running.)
- When running the Setup wizard, turn off the power supply of connected devices.
- When making connections, also refer to the operating instructions of the other devices being connected.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Do not bundle power cords together with connection cables. Doing so can result in noise.

## Converting input video signals for output (Video conversion function)

This unit is equipped with four types of video input connectors (HDMI, Component video, S-Video and Video) and three types of video output connectors (HDMI, Component video, and Video).

Use the connectors corresponding to the devices to be connected.

This function automatically converts various formats of video signals input to this unit into the formats used to output the video signals from this unit to a monitor.



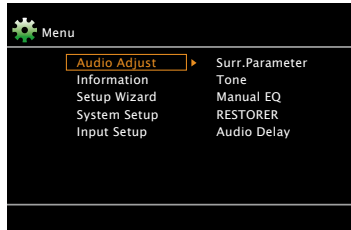
- The video conversion function supports the NTSC, PAL, SECAM, NTSC 4.43, PAL-N, PAL-M and PAL-60 formats.
- Resolutions of HDMI-compatible TVs can be checked at "Monitor Info." ([page 63](#)).

### NOTE

- HDMI signals cannot be converted into analog signals.
- Component video input signals cannot be converted into Video format.
- When a non-standard video signal from a game machine or some other source is input, the video conversion function might not operate.

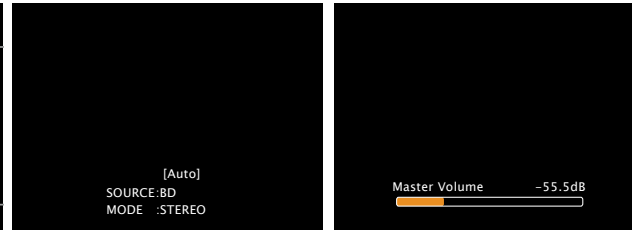
## Examples of screen display

- Menu screen



- Status display screen

When the input source is switched. When the volume is adjusted.



Status display: The operating status appears briefly on the screen when the input source is switched or the volume is changed.

### NOTE

- If you operate the menu while playing back 3D video content or computer's resolution (e.g. VGA), the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
- This unit does not show the status display while playing back 3D video content or computer's resolution (e.g. VGA).
- The menu screen and status display are displayed when this unit and a TV are connected by HDMI. Furthermore, the menu screen and status display are not displayed when this unit and a TV are connected by VIDEO and COMPONENT VIDEO.

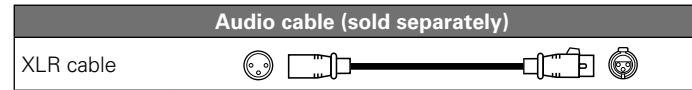
## Connecting a power amplifier

- First connect a power amplifier in order to output audio from this unit.
- Switch the output voltage with the output level selector according to the connected power amplifier.
- For how to connect this unit with power amplifier, see "Connecting a power amplifier" (page 6) and "Speaker installation/connection (Advanced connection)" (page 38).

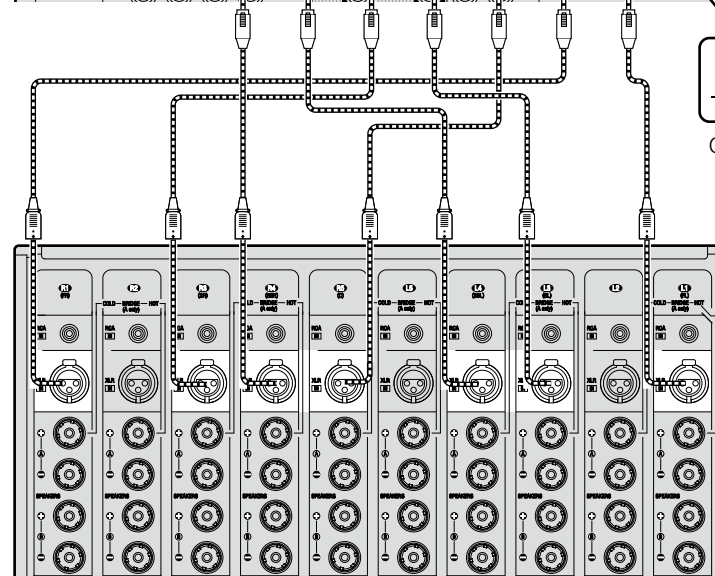
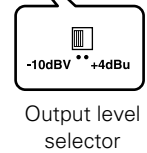
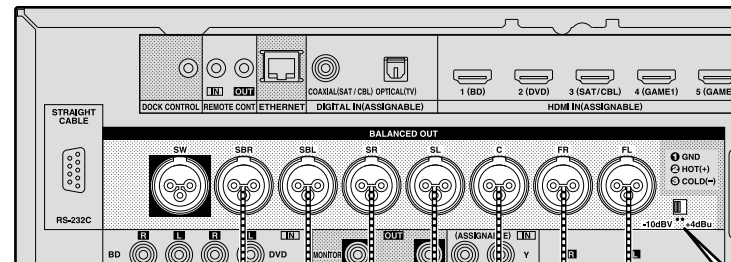
### NOTE

Be sure to turn the power off before setting.

## Cables used for connections



### This unit



### Power amplifier

## Connecting an HDMI-compatible device

You can connect up to seven HDMI-compatible devices (6-inputs/1-output) to the unit.

### HDMI function

This unit supports the following HDMI functions:

- 3D
- Deep Color ([page 122](#))
- Auto Lip Sync ([page 68, 122](#))
- “x.v.Color”, sYCC601 color, Adobe RGB color, Adobe YCC601 color ([page 122, 123, 124](#))
- High definition digital audio format
- ARC (Audio Return Channel)
- Content Type
- CEC (HDMI control)

#### Copyright protection system

In order to play back digital video and audio such as BD-Video or DVD-Video via HDMI connection, both this unit and TV or the player need to support the copyright protection system known as HDCP (High-bandwidth Digital Content Protection System). HDCP is copyright protection technology comprised of data encryption and authentication of the connected AV devices. This unit supports HDCP.

- If a device that does not support HDCP is connected, video and audio are not output correctly. Read the owner’s manual of your television or player for more information.

### About HDMI cables

- When a device supporting Deep Color is connected, use a cable compatible with “High Speed HDMI cable” or “High Speed HDMI cable with Ethernet”.
- When the ARC function is used, connect a device with a “Standard HDMI cable with Ethernet” or “High Speed HDMI cable with Ethernet” for HDMI.

### HDMI control function ([page 46](#))

This function allows you to operate external devices from the unit and operate the unit from external devices.

#### NOTE

- The HDMI control function may not work depending on the device it is connected to and its settings.
- You cannot operate a TV or Blu-ray Disc player/DVD player that is not compatible with the HDMI control function.

### About 3D function

This unit supports input and output of 3D (3 dimensional) video signals of HDMI.

To play back 3D video, you need a TV and player that provide support for the HDMI 3D function and a pair of 3D glasses.

#### NOTE

- When playing back 3D video, refer to the instructions provided in the manual of your playback device together with this manual.
- If you operate the menu while playing back 3D video content, the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
- This unit does not show the status display while playing back 3D video content.
- If 3D video with no 3D information is input, the menu screen and status display on this unit are displayed over the playback video.
- If 2D video is converted to 3D video on the television, the menu screen and status display on this unit are not displayed correctly. To view the menu screen and status display on this unit correctly, turn the television setting that converts 2D video to 3D video off.

### About ARC (Audio Return Channel) function

The Audio Return Channel in HDMI enables a TV, via a single HDMI cable, to send audio data “upstream” to this unit.

#### NOTE

- To enable the ARC function, set “HDMI Control” to “ON” ([page 68](#)).
- When connecting a TV that does not support the ARC function, a separate connection using an audio cable is required. In this case, refer to “Connecting a TV” ([page 10](#)) for the connection method.

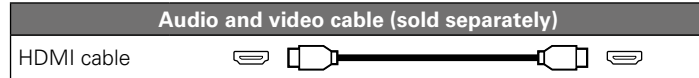
### About Content Type

HDMI enables simple, automated picture setting selection with no user intervention.

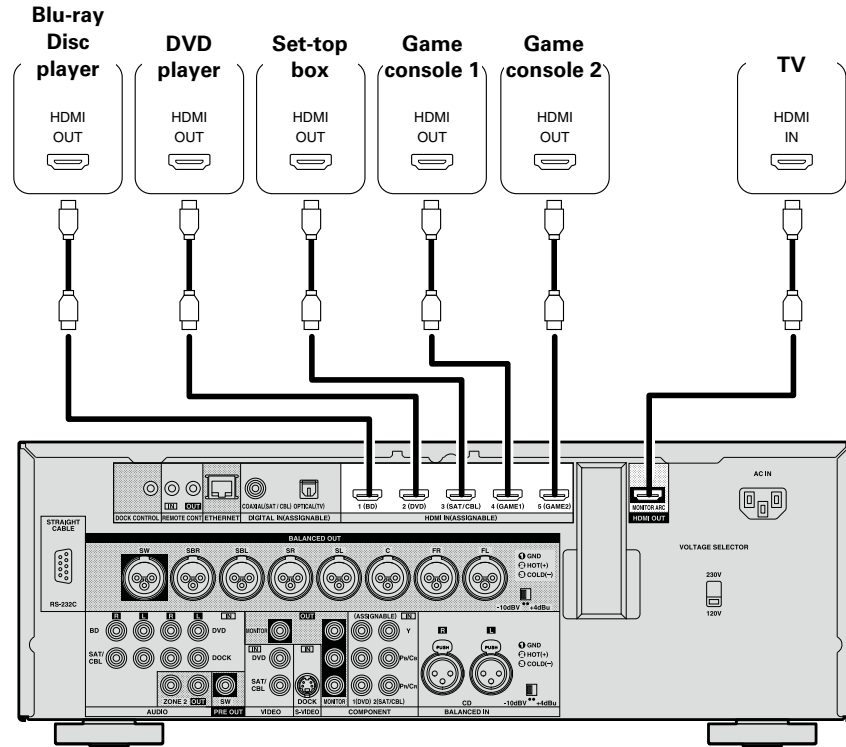
#### NOTE

To enable the Content Type, set “Video Mode” to “Auto” ([page 79](#)).

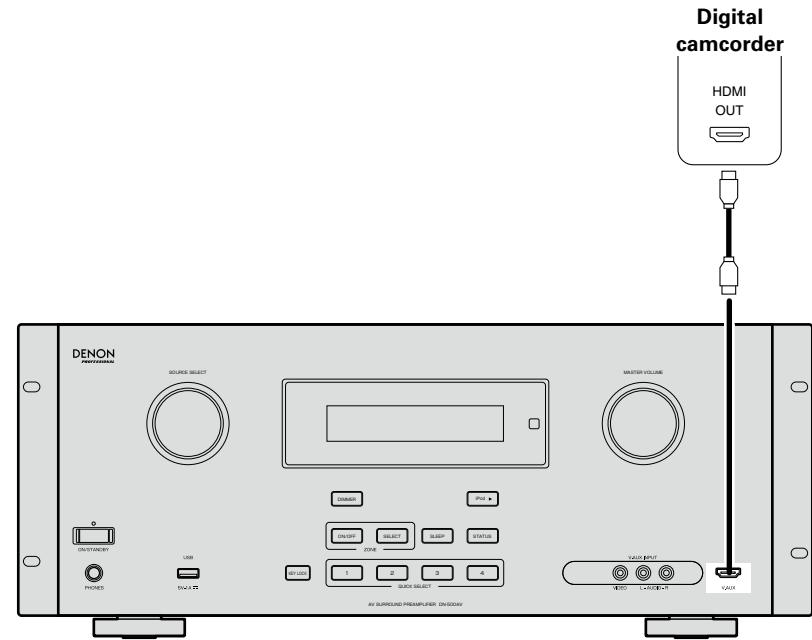
### Cables used for connections



- This interface allows transfer of digital video signals and digital audio signals over a single HDMI cable.



[Rear panel]



[Front panel]



- When this unit is connected to other devices with HDMI cables, connect this unit and TV also with an HDMI cable.
- When connecting a device that supports Deep Color, please use a “High Speed HDMI cable” or “High Speed HDMI cable with Ethernet”.
- Video signals are not output if the input video signals do not match the monitor’s resolution. In this case, switch the Blu-ray Disc/DVD player’s resolution to a resolution with which the monitor is compatible.
- When this unit and monitor are connected with an HDMI cable, if the monitor is not compatible with HDMI audio signal playback, only the video signals are output to the monitor.

**NOTE**

The audio signal from the HDMI output connector (sampling frequency, number of channels, etc.) may be limited by the HDMI audio specifications of the connected device regarding permissible inputs.

**Connecting to a device equipped with a DVI-D connector**

When an HDMI/DVI conversion cable (sold separately) is used, the HDMI video signals are converted to DVI signals, allowing connection to a device equipped with a DVI-D connector.

**NOTE**

- No sound is output when connected to a device equipped with a DVI-D connector. Make separate audio connections.
- Signals cannot be output to DVI-D devices that do not support HDCP.
- Depending on the combination of devices, the video signals may not be output.

**Settings related to HDMI connections**

Set as necessary. For details, see the respective reference pages.

**Input Assign (page 78)**

Set this to change the HDMI input connector to which the input source is assigned.

**HDMI Setup (page 68)**

Make settings for HDMI video/audio output.

- Auto Lip Sync
- Standby Source
- HDMI Audio Out
- P.Off Control
- HDMI Control

**NOTE**

The audio signal input from the HDMI input connector can be output as an output signal from the HDMI output connector by setting the HDMI audio output destination to TV.

Audio signals input via the Analog/Coaxial/Optical input connectors cannot be output from the HDMI output connector.

## Connecting a TV

- Select the connector to use and connect the device.
- For video connections, see “Converting input video signals for output (Video conversion function)” ([page 5](#)).
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” ([page 7](#)).



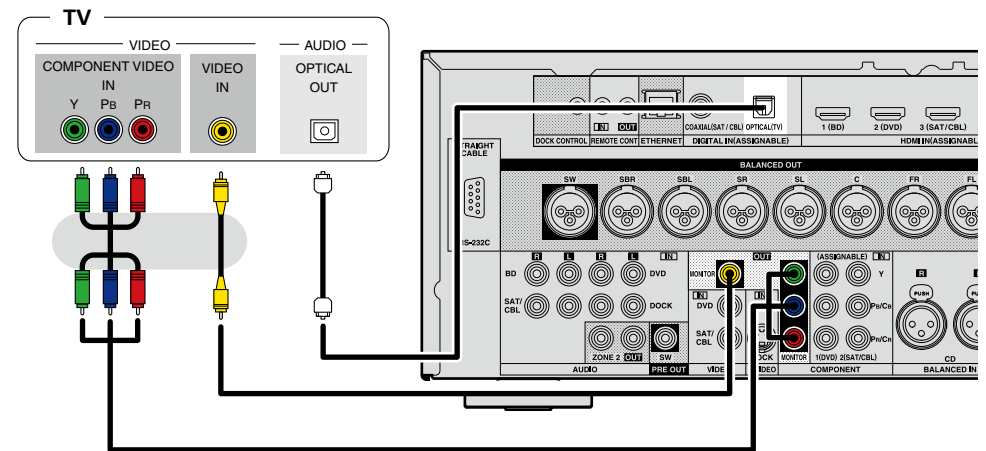
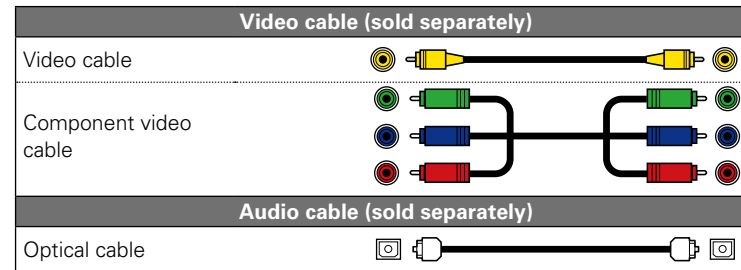
To listen to TV audio through this device, use the optical digital connection.

### NOTE

The optical connection is not required when a TV compatible with the ARC function (Audio Return Channel HDMI standard function) is connected to this unit via an HDMI connection.

For details, see “About ARC (Audio Return Channel) function” ([page 7](#)) or refer to the instruction manual for your TV.

## Cables used for connections



### Set as Necessary

Set this to change the digital input connector or component video input connector to which the input source is assigned.

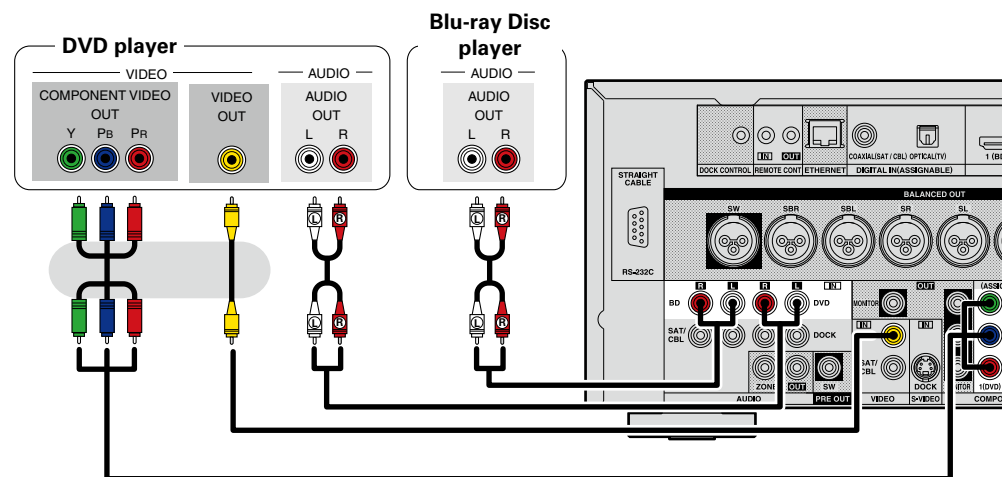
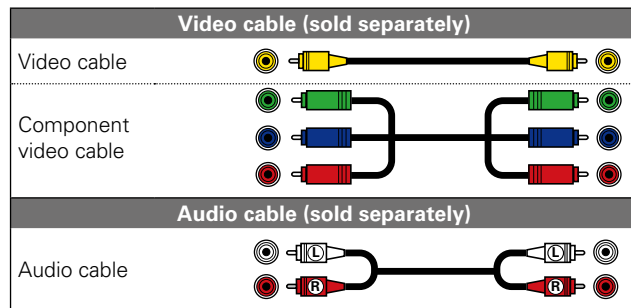
“Input Assign” ([page 78](#))



## Connecting a Blu-ray Disc player/DVD player

- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” ([page 7](#)).

### Cables used for connections



### Set as Necessary

Set this to change the digital input connector or component video input connector to which the input source is assigned.

“Input Assign” ([page 78](#))

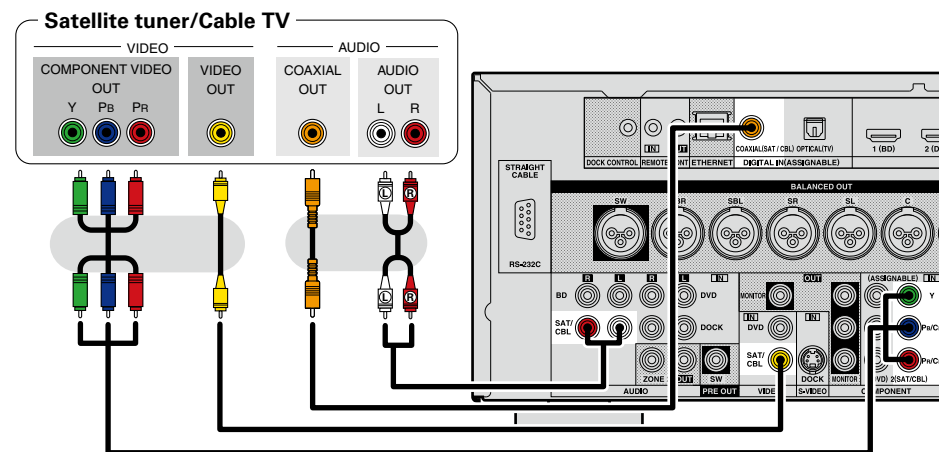
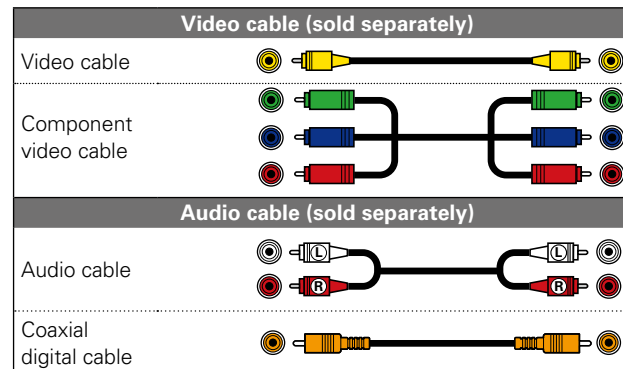


When you want to play back HD Audio (Dolby TrueHD, DTS-HD, Dolby Digital Plus, DTS Express) and Multi-channel PCM with this unit, use an HDMI connection ([page 7](#) “Connecting an HDMI-compatible device”).

## Connecting a set-top box (Satellite tuner/Cable TV)

- You can watch satellite or cable TV.
- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” ([page 7](#)).

### Cables used for connections



### Set as Necessary

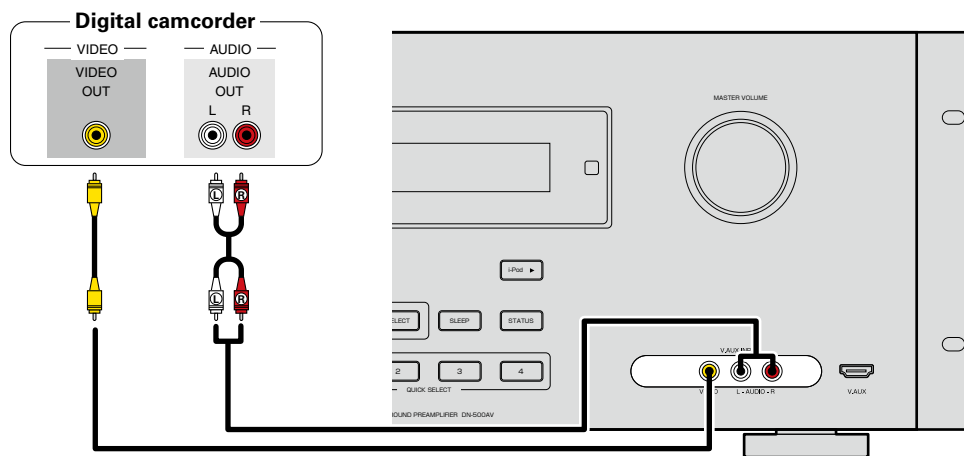
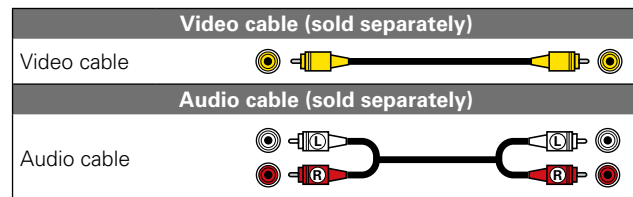
Set this to change the digital input connector or component video input connector to which the input source is assigned.

“Input Assign” ([page 78](#))

## Connecting a digital camcorder

For instructions on HDMI connections, see “Connecting an HDMI-compatible device” ([page 7](#)).

### Cables used for connections



### Set as Necessary

Set this to change the digital input connector or component video input connector to which the input source is assigned.

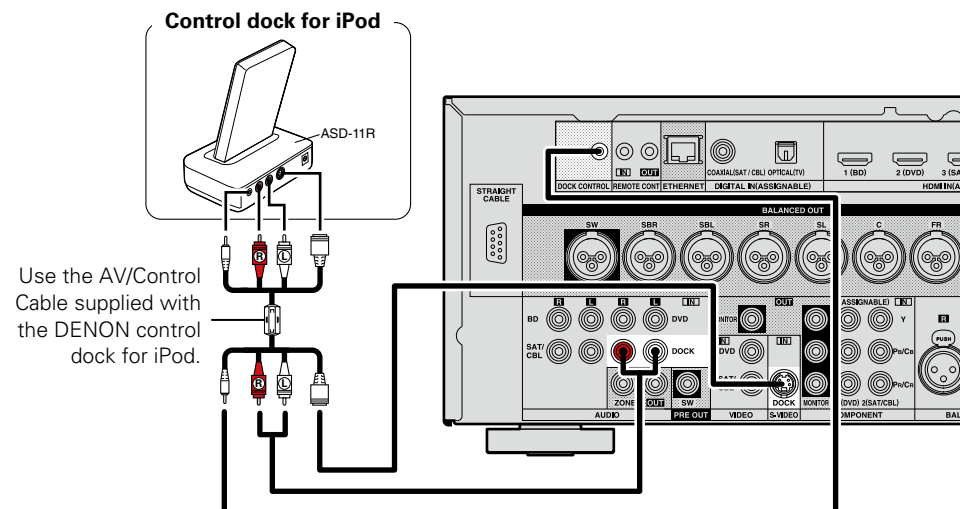
“Input Assign” ([page 78](#))

### NOTE

When a non-standard video signal from a game machine or some other source is input, the video conversion function might not operate. In this case, use the monitor output of the same connector as the input.

## Connecting a control dock for iPod

- For a control dock for iPod, use ASD-1R or ASD-11R made by DENON (sold separately).
- For instructions on the control dock for iPod settings, refer to the control dock for iPod’s operating instructions.
- For details on the operations, see “Use a DENON control dock for iPod to play back” ([page 21](#)).

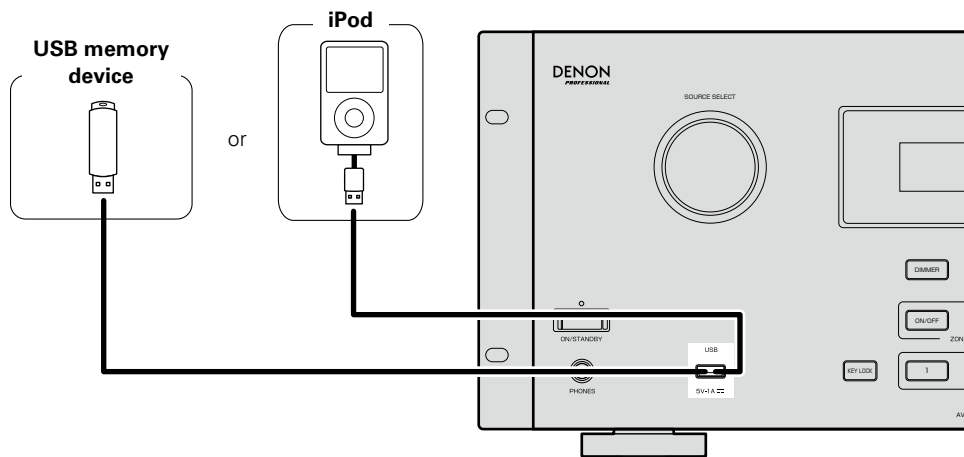


## Connecting an iPod or USB memory device to the USB port

For details on the operations, see “Connect an iPod directly to the USB port to play back” (page 23) or “Playing a USB memory device” (page 30).

### Cables used for connections

To connect an iPod to this unit, use the USB cable supplied with the iPod.



- When you want to play back a video file stored on an iPod, use a DENON control dock for iPod (ASD-1R and ASD-11R, sold separately) (page 12 “Connecting a control dock for iPod”).
- This unit supports playback from 5th generation iPod touch, iPod classic and iPod nano or later.
- D&M does not guarantee that all USB memory devices will operate or receive power. When using a portable USB connection type HDD of the kind to which an AC adapter can be connected to supply power, use the AC adapter.

### NOTE

- USB memory devices will not work via a USB hub.
- Do not use an extension cable when connecting a USB memory device. This may cause radio interference with other devices.
- This unit does not support playback on an iPad. Do not connect an iPad to the unit.
- When connecting an iPhone to this unit, keep the iPhone at least 20 cm away from this unit. If the iPhone is kept closer to this unit and a telephone call is received by the iPhone, noise may be output from this device.

### Supported iPod models

#### • iPod classic



iPod classic  
80GB



iPod classic  
160GB (2007)



iPod classic  
160GB (2009)

#### • iPod nano



iPod nano  
3rd generation  
(video)  
4GB 8GB



iPod nano  
4th generation (video)  
8GB 16GB



iPod nano  
5th generation (video camera)  
8GB 16GB



iPod nano  
6th generation  
8GB 16GB

#### • iPod touch



iPod touch  
3rd generation  
32GB 64GB



iPod touch  
4th generation  
8GB 32GB 64GB

#### • iPhone



iPhone 3GS  
8GB 16GB 32GB



iPhone 4  
8GB 16GB 32GB



iPhone 4S  
16GB 32GB 64GB

(as of June 2012)

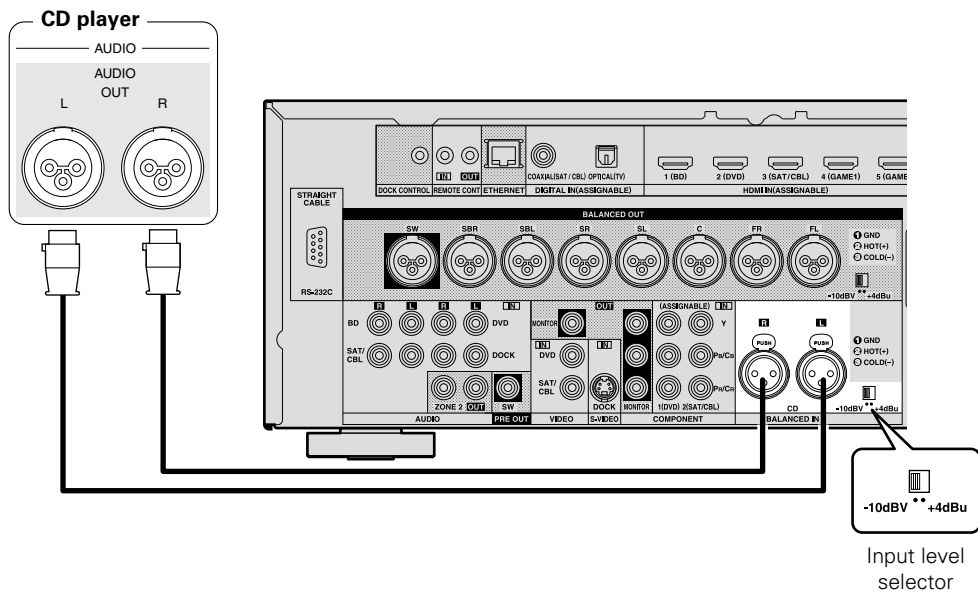
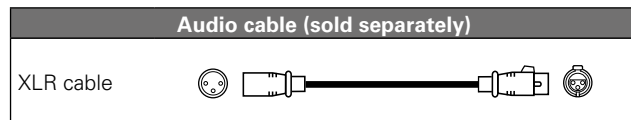
## Connecting a CD player

- Select the connector to use and connect the device.
- Switch the input voltage with the input level selector according to the connected CD player.

### NOTE

Be sure to turn the power off before setting.

### Cables used for connections



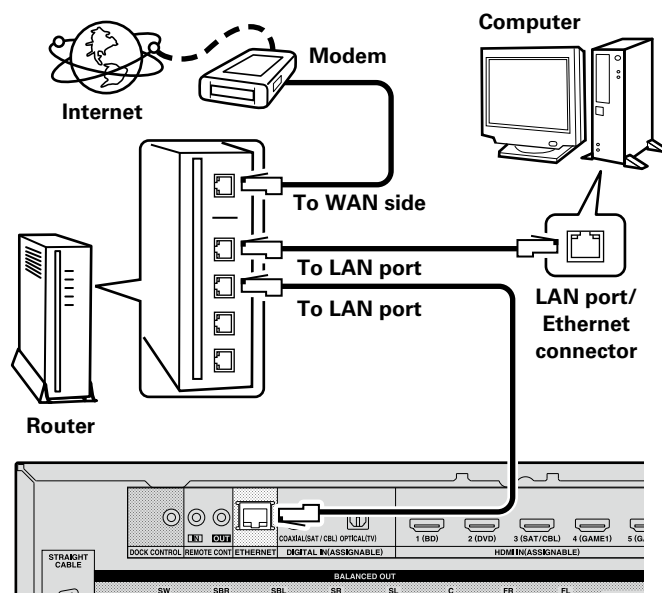
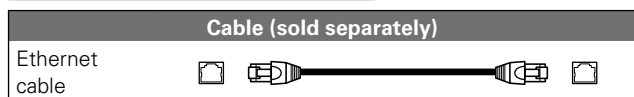
### Set as Necessary

Set this to change the digital input connector to which the input source is assigned.  
"Input Assign" ([page 78](#))

## Connecting to a network (LAN)

- This unit lets you play via your network (LAN) music files stored on a computer.  
You can also operate this unit from a computer using the Web control function.
- You can update by downloading the latest firmware from the D&M Professional website.  
For more information, on the menu, select "Firmware Update" (☞ [page 75](#)).
- See "Network Setup" on the menu (☞ [page 70](#)) for more information on network setting.

### Cables used for connections



For connections to the Internet, contact an ISP (Internet Service Provider) or a computer shop.

## Required system

### ❑ Broadband internet connection

### ❑ Modem

Device that connects to the broadband circuit and conducts communications on the Internet.

A type that is integrated with a router is also available.

### ❑ Router

When using this unit, we recommend you use a router equipped with the following functions:

- Built-in DHCP server  
This function automatically assigns IP addresses on the LAN.
- Built-in 100BASE-TX switch  
When connecting multiple devices, we recommend a switching hub with a speed of 100 Mbps or greater.

### ❑ Ethernet cable (CAT-5 or greater recommended)

- Use only a shielded STP or ScTP LAN cable which is available at retailer.
- Some flat type Ethernet cables are easily affected by noise.  
We recommend using a normal type cable.



- If you have an Internet provider contract for a line on which network settings are made manually, make the settings at "Network Setup" (☞ [page 70](#)).
- With this unit, it is possible to use the DHCP and Auto IP functions to make the network settings automatically.
- When using this unit with the broadband router's DHCP function enabled, this unit automatically performs the IP address setting and other settings.  
When using this unit connected to a network with no DHCP function, make the settings for the IP address, etc., at "Network Setup" (☞ [page 70](#)).
- When setting manually, check the setting contents with the network administrator.

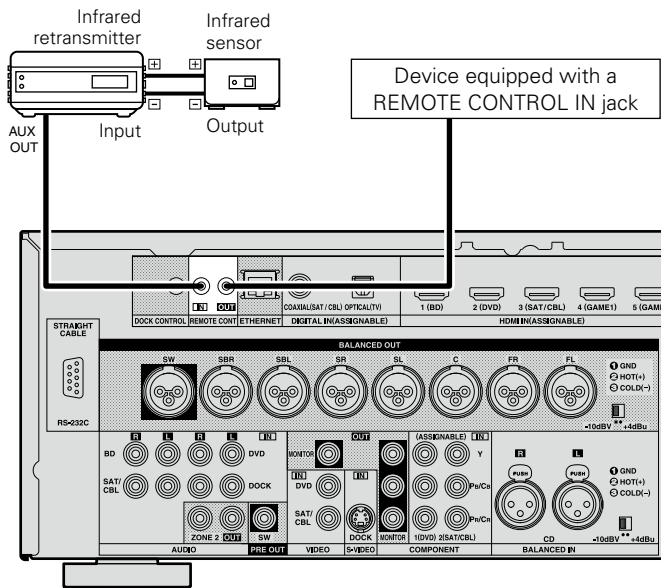
## NOTE

- A contract with an ISP is required to connect to the Internet.  
No additional contract is needed if you already have a broadband connection to the Internet.
- The types of routers that can be used depend on the ISP. Contact an ISP or a computer shop for details.
- D&M assumes no responsibility whatsoever for any communication errors or troubles resulting from customer's network environment or connected devices.
- This unit is not compatible with PPPoE. A PPPoE-compatible router is required if you have a contract for a type of line set by PPPoE.
- Do not connect an ETHERNET connector directly to the LAN port/Ethernet connector on your computer.
- To listen to audio streaming, use a router that supports audio streaming.

# Connecting an external control device

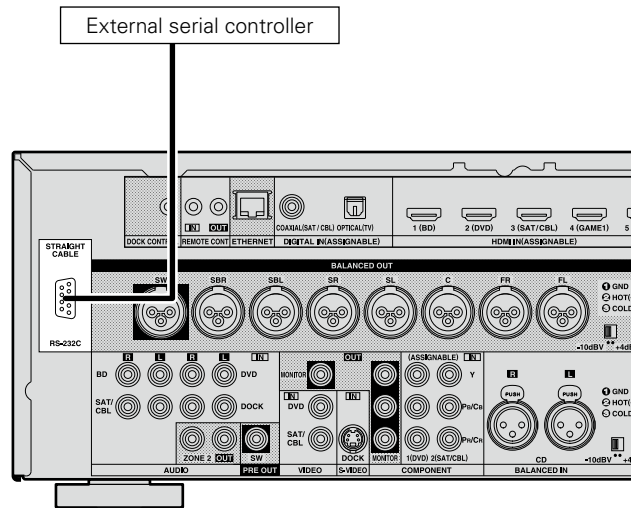
## REMOTE CONTROL jacks

If this unit is installed in a location that is out of range of the signal from the remote control unit, you can still operate the unit and the devices connected to it by using a commercially available IR receiver. You can also use it to remotely control ZONE2 (another room).



## RS-232C connector

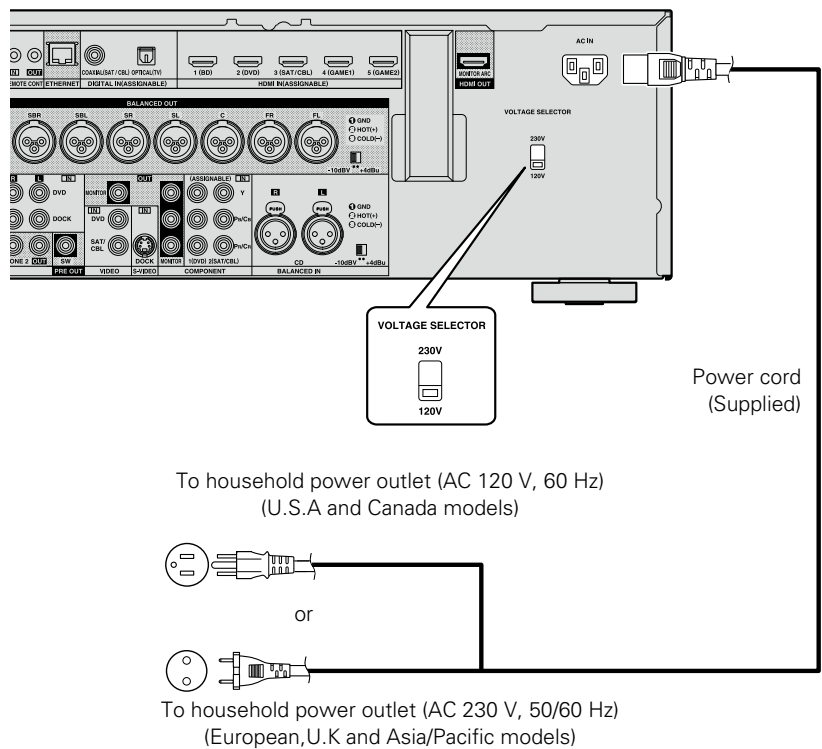
When you connect an external control device, you can control this unit with the external control device.



Perform the operation below beforehand.

- ① Turn on the power of this unit.
- ② Turn off the power of this unit from the external controller.
- ③ Check that the unit is in the standby mode.

## Connecting the power cord



Use the voltage selector to switch the voltage according to your region.  
(It is set to 230V at the time of purchase.)

- U.S.A and Canada : 120 V
- European and U.K : 230 V
- Other Countries : Switch the voltage according to your region.

### NOTE

Be sure to turn the power off before setting.

# Settings

Here, we explain “Network Setup”, which allows you to connect this unit to a network (LAN).

This unit lets you play via your network (LAN) music files stored on a computer.

## □ Making the network settings (Network Setup)

(👉 [page 18](#))

## Playback (Basic operation) (👉 [page 19](#))

## Selecting a listening mode (Surround mode)

(👉 [page 33](#))

## Playback (Advanced operation) (👉 [page 46](#))



## Making the network settings (Network Setup)

GUI

This unit can be connected to a network (LAN) to listen to play back music files and still image (JPEG) files stored on a computer.

### 1 Connect the Ethernet cable (👉 [page 15](#) “Connecting to a network (LAN)”).

### 2 Turn on this unit (📖 [page 5](#) “Getting Started”).

This unit performs automatic network setup due to the DHCP function.

When connecting to a network that has no DHCP function, perform the setting in “Network Connect.” (👉 [page 70](#)).



# Playback (Basic operation)

## Settings (👉 page 18)

- ❑ **Selecting the input source** (👉 page 19)
- ❑ **Adjusting the master volume** (👉 page 20)
- ❑ **Turning off the sound temporarily** (👉 page 20)

- ❑ **Playing a Blu-ray Disc player/DVD player** (👉 page 20)
- ❑ **Playing a CD player** (👉 page 20)
- ❑ **Playing an iPod** (👉 page 21)
- ❑ **Playing network audio** (👉 page 25)
- ❑ **Playing a USB memory device** (👉 page 30)

## Selecting a listening mode (Surround mode) (👉 page 33)

## Playback (Advanced operation) (👉 page 46)

## Important information

Before starting playback, make the connections between the different devices and the settings on the unit.

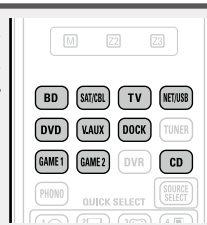
### NOTE

Also refer to the operating instructions of the connected devices when playing them.

## Selecting the input source

Press the input source select button (BD, SAT/CBL, TV, NET/USB, DVD, V.AUX, DOCK, GAME1, GAME2 or CD) to be played back.

The desired input source can be selected directly.

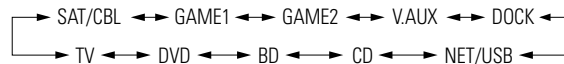


You can also use the following operation to select an input source.

### ❑ Using the knob on the main unit

Turn **SOURCE SELECT**.

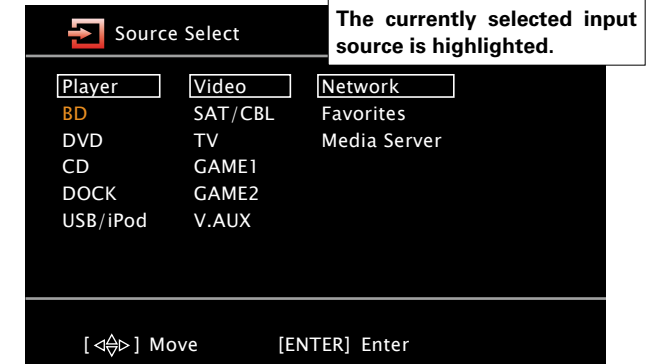
- Turning **SOURCE SELECT** switches the input source, as shown below.



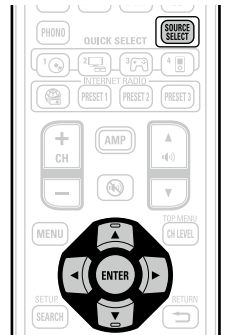
- When **iPod** on the main unit is pressed, the input source of this unit is switched to "DOCK" or "NET/USB" and the connected iPod is automatically played (👉 page 24 "iPod play function").

### ❑ Using the "Source Select" menu

Switch the remote control unit to the **[M]** (MAIN ZONE) mode when performing this operation (👉 page 82 "Operating AV devices"). If the remote control unit is in **[Z2]** (ZONE2) mode, the "Source Select" menu will not be displayed when **SOURCE SELECT** is pressed.



- 1 Press **SOURCE SELECT**.  
Display the "Source Select" menu.
- 2 Use **Δ****▽****◀****▶** to select the input source, then press **ENTER**.  
The input source is set and the source selection menu is turned off.



- When using with an iPod connected directly to the USB port of this unit, select "USB/iPod" for the input source.
- Input sources that are not going to be used can be set ahead of time. Make this setting at "Source Delete" (👉 page 73).
- To turn off the source selection menu without selecting an input source, press **SOURCE SELECT** again.
- When **SOURCE SELECT** is pressed, the AMP-operation mode starts automatically (👉 page 82).

## Adjusting the master volume

Use  **▲▼** to adjust the volume.

- When the "Volume Display" setting ( [page 73](#)) is "Relative"

[Adjustable range]

--- -80.5dB - 18.0dB

- When the "Volume Display" setting ( [page 73](#)) is "Absolute"

[Adjustable range] 0.0 - 99.0

- The variable range differs according to the input signal and channel level setting.




You can also operate via the main unit. In this case, perform the following operations.



Turn **MASTER VOLUME** to adjust the volume.

## Turning off the sound temporarily

Press .

- The power indicator flashes green.
- "MUTE" indicator on the display lights.
-  appears on a TV screen.



- The sound is reduced to the level set at "Mute Level" ( [page 73](#)).
- To cancel, press  again. Muting can also be canceled by adjusting the master volume.

## Playing a Blu-ray Disc player/DVD player

The following describes the procedure for playing Blu-ray Disc player/DVD player.

### 1 Prepare for playback.

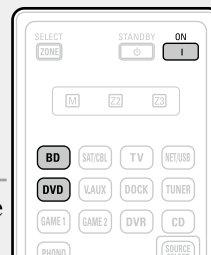
- Turn on the power of the TV, subwoofer and player.
- Change the TV input to the input of this unit.
- Load the disc in the player.

### 2 Press ON to turn on power to the unit.

### 3 Press BD or DVD to switch an input source for a player used for playback.

### 4 Play the device connected to this unit.

- Make the necessary settings on the player (language setting, subtitles setting, etc.) beforehand.



## Playing a CD player

The following describes the procedure for playing CD player.

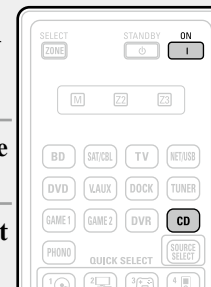
### 1 Prepare for playback.

- Turn on the power of the subwoofer and player.
- Load the disc in the player.

### 2 Press ON to turn on power to the unit.

### 3 Press CD to switch the input source to the CD player.

### 4 Play the device connected to this unit.



# Playing an iPod

There are two methods for iPod playback.

- ① **Use a DENON control dock for iPod to play back.**  
You can play back both video, photo and audio.
- ② **Connect an iPod directly to the USB port to play back** (page 23).  
You can play back audio only.

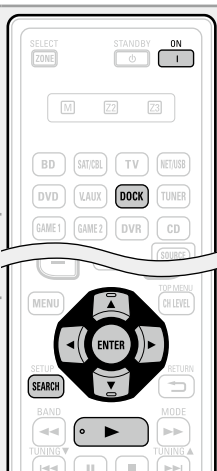
## ① Use a DENON control dock for iPod to play back

If you use a separately sold DENON control dock for iPod (ASD-11R or ASD-111R), you will be able to play back videos, photos, music, and other content on the iPod.

### □ Listening to music on an iPod

#### 1 Prepare for playback.

- ① Connect the DENON control dock for iPod to this unit (page 12 "Connecting a control dock for iPod").
- ② Set the iPod in the DENON control dock for iPod.



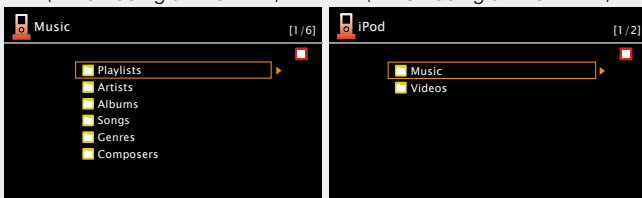
#### 2 Press ON to turn on power to the unit.

#### 3 Press DOCK to switch the input source to "DOCK".

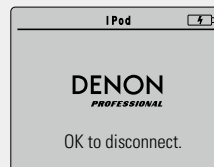
- If "Browse mode" is selected in step 4, the following screen is displayed on a TV screen, depending on the connected control dock for iPod.

(When using an ASD-11R)

(When using an ASD-111R)



- In "Browse mode", the iPod display is as shown at right.



#### NOTE

If the connections screen is not displayed, the iPod may not be properly connected. Reconnect it.

## 4 Press SEARCH and hold it down for 2 seconds or more to select the display mode.

- There are two modes for displaying the contents recorded on the iPod.

**Browse mode** Display iPod information on the TV screen.

- English letters, numbers and certain symbols are displayed. Incompatible characters are displayed as "." (period).

**Remote mode** Display iPod information on the iPod screen.

- "Remote iPod" is displayed on the display of this unit.

Display mode		Browse mode	Remote mode
Playable files	Music file	✓	✓
	Photo file		✓ *2
	Video file	✓ *1	✓ *2
Active buttons	Remote control unit (This unit)	✓	✓
	iPod		✓

\*1 When using an ASD-11R DENON control dock for iPod.

\*2 Video may not be output, depending on the combination of ASD-11R or ASD-111R DENON control dock for iPod and iPod.

## 5 Use Δ∇ to select the item, then press ENTER or ▷ to select the file to be played.

## 6 Press ENTER, ▷ or ▶. Playback starts.



- You can specify the duration of the on-screen display to be displayed (default: 30 sec) at menu "iPod" (page 74). When the iPod display is off, you can press Δ∇◁▷ to return to the previous screen.
- To play back compressed audio with extended bass or treble reproduction, we recommend playback in RESTORER mode (page 62). The default setting is "Mode3".
- In Browse mode, press **STATUS** on the main unit during playback to check the title name, artist name, and album name on the display of this unit.

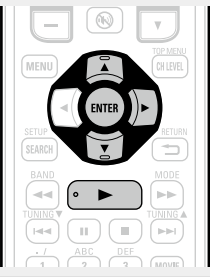
#### NOTE

- Press **STANDBY** and set this unit's power to the standby mode before disconnecting the iPod. You can also switch the input source to other than "DOCK" and then disconnect the iPod.
- Depending on the type of iPod and the software version, some functions may not operate.
- Note that D&M will accept no responsibility whatsoever for any problems arising with the data on an iPod when using this unit in conjunction with the iPod.



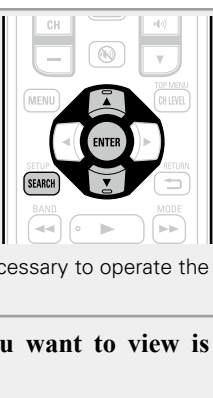
**❑ Viewing videos on an iPod in the Browse mode**

When an iPod equipped with a video function is connected to a DENON ASD-11R control dock for iPod, image files can be played in the Browse mode.

<b>1</b>	Use $\Delta$ $\nabla$ to select “Videos”, then press <b>ENTER</b> or $\triangleright$ .	
<b>2</b>	Use $\Delta$ $\nabla$ to select the search item or folder, then press <b>ENTER</b> or $\triangleright$ .	
<b>3</b>	Use $\Delta$ $\nabla$ to select the video file, then press <b>ENTER</b> , $\triangleright$ or $\blacktriangleright$ . Playback starts.	

**❑ Viewing photos and videos on an iPod in the Remote mode**

This unit can play back on a TV screen photos and data stored on an iPod equipped with a slide show or video function.

<b>1</b>	Press and hold <b>SEARCH</b> to set the Remote mode. “Remote iPod” is displayed on the display of this unit.	
<b>2</b>	Watching the iPod’s screen, use $\Delta$ $\nabla$ to select “Photos” or “Videos”.	
<b>3</b>	Press <b>ENTER</b> until the image you want to view is displayed.	

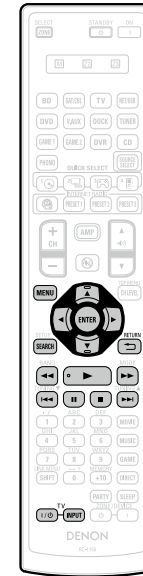


“TV Out” at the iPod’s “Slide show Settings” or “Video Settings” must be set to “On” in order to display the iPod’s photo data or videos on the monitor. For details, see the iPod’s operating instructions.

**NOTE**

Video may not be output, depending on the combination of ASD-1R or ASD-11R and iPod.

**❑ iPod operation**



Operation buttons	Function
<b>MENU</b>	Amp menu
$\Delta$ $\nabla$ $\triangleleft$ $\triangleright$	Cursor operation / Auto search (cue, $\Delta$ $\nabla$ ) / Manual search (Press and hold, $\Delta$ $\nabla$ )
<b>ENTER</b> (Press and release)	Enter / Pause
<b>ENTER</b> (Press and hold)	Stop
<b>SEARCH</b> (Press and release)	Page search mode*
<b>SEARCH</b> (Press and hold)	Browse / Remote mode switching
<b>RETURN</b> $\hookrightarrow$	Return
$\triangleleft\triangleleft$ $\triangleright\triangleright$ (Press and hold)	Manual search (fast-reverse/fast-forward)
$\blacktriangleright$	Playback / Pause
$\blacktriangleleft$ $\blacktriangleright$	Auto search (cue)
<b>II</b>	Pause
<b>■</b>	Stop
<b>TV I / <math>\text{⏻}</math></b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)

- Repeat playback ([page 81](#) “Repeat”)
- Shuffling playback ([page 81](#) “Shuffle”)

\* When the menu screen is displayed, press **SEARCH**, then press  $\triangleleft$  (previous page) or  $\triangleright$  (next page). To cancel, press  $\Delta$   $\nabla$  or **SEARCH**.

## 2 Connect an iPod directly to the USB port to play back

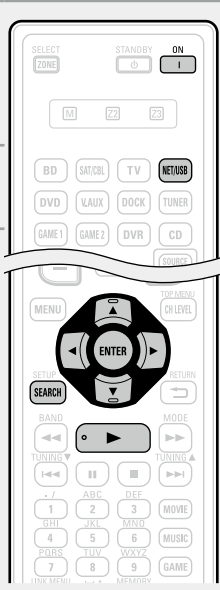
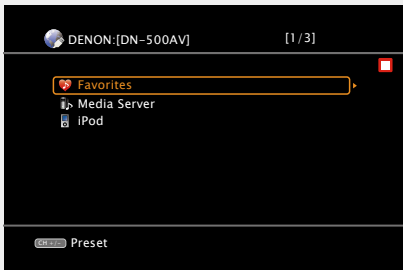
You can use the USB cable provided with the iPod to connect the iPod with the unit's USB port.

- This unit supports audio playback from the iPod (fifth generation or later), iPod nano, iPod classic, iPod touch and iPhone (it is not compatible with iPod shuffle).

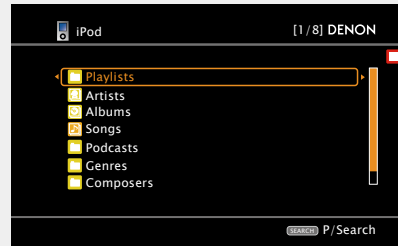
**1** Connect the iPod to the USB port (see [page 13](#) "Connecting an iPod or USB memory device to the USB port").

**2** Press **ON** to turn on power to the unit.

**3** Press **NET/USB** to switch the input source to "NET/USB".



**4** Use  $\Delta$ / $\nabla$  to select "iPod", then press **ENTER** or  $\triangleright$ .



**NOTE**

If the "iPod" is not displayed, the iPod may not be properly connected. Reconnect it.

**5** Press **SEARCH** and hold it down for 2 seconds or more to select the display mode.

- There are two modes for displaying the contents recorded on the iPod.

**Browse mode** Display iPod information on the TV screen.

- English letters, numbers and certain symbols are displayed. Incompatible characters are displayed as "." (period).

**Remote mode** Display iPod information on the iPod screen.

- "Remote iPod" is displayed on the display of this unit.
- The Remote mode is not supported on fifth generation iPod or first generation iPod nano.

Display mode		Browse mode	Remote mode
Playable files	Music file	✓	✓
	Video file		*
Active buttons	Remote control unit (This unit)	✓	✓
	iPod		✓

\* Only the sound is played.

**6** Use  $\Delta$ / $\nabla$  to select the item, then press **ENTER** or  $\triangleright$  to select the file to be played.

**7** Press **ENTER**,  $\triangleright$  or  $\blacktriangleright$ . Playback starts.



- You can specify the duration of the on-screen display to be displayed (default: 30 sec) at menu "iPod" (see [page 74](#)). When the iPod display is off, you can press  $\Delta$ / $\nabla$ / $\triangleleft$ / $\triangleright$  to return to the previous screen.
- To play back compressed audio with extended bass or treble reproduction, we recommend playback in RESTORER mode (see [page 62](#)). The default setting is "Mode3".
- In Browse mode, press **STATUS** on the main unit during playback to check the title name, artist name, and album name.

**NOTE**

- Depending on the type of iPod and the software version, some functions may not operate.
- Note that D&M will accept no responsibility whatsoever for any problems arising with the data on an iPod when using this unit in conjunction with the iPod.

## □ iPod operation



Operation buttons	Function
<b>MENU</b>	Amp menu
$\Delta \nabla \triangleleft \triangleright$	Cursor operation / Auto search (cue, $\Delta \nabla$ ) / Manual search (Press and hold, $\Delta \nabla$ )
<b>ENTER</b> (Press and release)	Enter / Pause
<b>ENTER</b> (Press and hold)	Stop
<b>SEARCH</b> (Press and release)	Page search*1 / Character sort*2
<b>SEARCH</b> (Press and hold)	Browse / Remote mode switching
<b>RETURN</b> $\curvearrowright$	Return
$\lll \ggg$ (Press and hold)	Manual search (fast-reverse/fast-forward)
$\blacktriangleright$	Playback / Pause
$\lll \blacktriangleright \ggg$	Auto search (cue)
<b>II</b>	Pause
$\blacksquare$	Stop
<b>TV I / <math>\phi</math></b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)

- **Repeat playback** ([page 81](#) "Repeat")
- **Random playback** ([page 81](#) "Shuffle")

- \*1 When the menu screen is displayed, press **SEARCH**, then press  $\triangleleft$  (previous page) or  $\triangleright$  (next page).  
To cancel, press  $\Delta \nabla$  or **SEARCH** twice.
- \*2 When the menu screen is displayed, press **SEARCH** twice, then press  $\triangleleft \triangleright$  to select the first letter you want to search mode.  
• If it is not possible to search the list, "unsorted list." is displayed.  
To cancel, press  $\Delta \nabla$  or **SEARCH**.



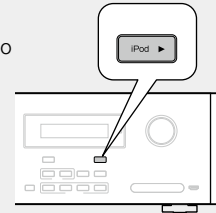
If the list is not in alphabetical order, you may not be able to perform a character sort.

## iPod play function

If **iPod  $\blacktriangleright$**  on the main unit is pressed when a control dock for iPod or an iPod (USB) is connected, the iPod starts playback.

### Press iPod $\blacktriangleright$ .

- This unit's input source switches to "DOCK" or "NET/USB".
- iPod playback starts.



### NOTE

If both a control dock for iPod ("DOCK") and an iPod ("NET/USB") are connected, playback with control dock for iPod ("DOCK") takes priority.

## Playing network audio

Follow this procedure to play music or still picture (JPEG) files stored on a computer.

### Important information

#### Media player

This function lets you play music files and playlists (m3u, wpl) stored on a computer (media server) connected to this unit via a network.

With this unit's network audio playback function, connection to the server is possible using one of the technologies below.

- Windows Media Player Network Sharing Service
- Windows Media DRM10

#### Album art function

When a WMA (Windows Media Audio), MP3 or MPEG-4 AAC file includes album art data, the album art can be displayed while the music files are playing.



If you use Ver.11 or later of Windows Media Player, the album art for WMA files can be displayed.

#### Slide show function

You can play back image (JPEG) files that are stored in folders on a media server as a slideshow. Also, you can set the time display that is shown during playback ([page 81](#)).

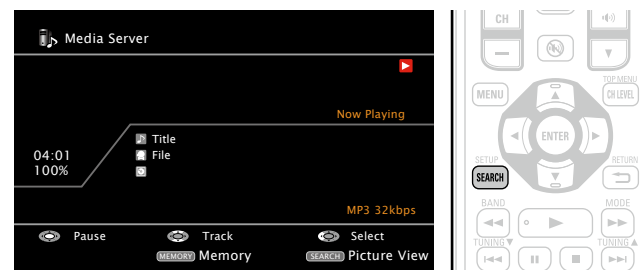


This unit plays back image (JPEG) files in the orientation in which they are stored in the folder.

#### Function that simultaneously plays back music and image files from the network

You can playback music and image files at the same time by playing back music files, and then playing back image files.

Also, when selecting music files after playing back image files, press **SEARCH** when the music playback screen is displayed. Music files and image files can be played back simultaneously. At this time, set "Slide Show" ([page 81](#)) in the menu to "ON".



Network contents that can be played back simultaneously are as follows.

- Music files: Favorites, Media Server, USB, iPod Browse Mode (NET/USB)
- Image files: Media Server, USB

**[Compatible formats]**

	Media server *1
<b>WMA</b> (Windows Media Audio)	✓
<b>MP3</b> (MPEG-1 Audio Layer-3)	✓
<b>WAV</b>	✓
<b>MPEG-4 AAC</b>	✓*2 *3
<b>FLAC</b> (Free Lossless Audio Codec)	✓ *4 *5
<b>JPEG</b>	✓

A server or server software compatible with distribution in the corresponding formats is required to play music files via a network.

## \*1 Media server

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit can show the artwork that was embedded by using MP3 ID3-Tag Ver. 2.3 or 2.4.
- This unit is compatible with WMA META tags.
- WAV format Quantization bit rate: 16 bits
- FLAC format Quantization bit rate: 16 or 24 bits

## \*2 Only files that are not protected by copyright can be played on this unit.

Content downloaded from pay sites on the Internet are copyright protected. Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.

## \*3 Windows Media Player 11 does not support m4a format distribution.

## \*4 Windows Media Player 11 and Windows Media Player 12 do not support FLAC format distribution.

## \*5 For FLAC format files, 32/44.1/48/88.2/96 kHz 16/24 bit 2channel attribute files can be played. For other file formats (MP3, WMA, m4A, WAV), 32/44.1/48 kHz 16 bit 2channel attribute files can be played.

**[Compatible formats]**

	Sampling frequency	Bit rate	Extension
<b>WMA</b> (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
<b>MP3</b> (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
<b>WAV</b>	32/44.1/48 kHz	–	.wav
<b>MPEG-4 AAC</b>	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4
<b>FLAC</b> (Free Lossless Audio Codec)	32/44.1/48/88.2/96 kHz	–	.flac

**NOTE**

- When using Twonky Media, if there are more than 300 sub folders stored in the selected folder, music files may not be recognized.
- When using Windows Media Player 11, if there are more than 10000 music files registered in the selected folder, music files may not be recognized.
- Depending on the Music server used, the pause operation may be unavailable.



## Playing files stored on a computer

Use this procedure to play music files, image files or playlists.

### 1 Prepare for playback.

- ① Check the network environment, then turn on this unit's power (☞ [page 15](#) "Connecting to a network (LAN)").
- ② If settings are required, make the "Network Connect." (☞ [page 70](#)).
- ③ Prepare the computer (☞ Computer's operating instructions).

### 2 Press SOURCE SELECT to display the "Source Select" menu, then select "Media Server" (☞ [page 19](#)).



### 3 Press $\Delta$ / $\nabla$ to select the server including the file to be played, then press ENTER or $\triangleright$ .

### 4 Press $\Delta$ / $\nabla$ to select the search item or folder, then press ENTER or $\triangleright$ .

### 5 Repeat step 4 until the file is displayed.

### 6 Press $\Delta$ / $\nabla$ to select the file, then press ENTER or $\triangleright$ . Playback starts once buffering reaches "100%".



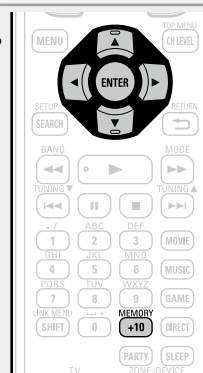
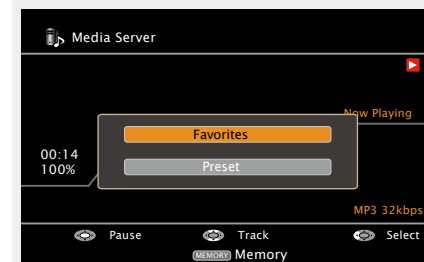
- Connections to the required system and specific settings must be made in order to play music files (☞ [page 15](#)).
- Before starting, you must launch the computer's server software and set the files as server contents. For details, see the operating instructions of your server software.
- Depending on the size of the still picture (JPEG) file, some time may be required for the file to be displayed.
- The order in which the tracks/files are displayed depends on the server specifications. If the tracks/ files are not displayed in alphabetical order due to the server specifications, searching by the first letter may not work properly.
- WMA Lossless files can be played when using a server supporting transcoding, such as Windows Media Player Ver. 11 or later.
- To play back compressed audio with extended bass or treble reproduction, we recommend playback in RESTORER mode (☞ [page 62](#)). The default setting is "Mode3".
- You can specify the duration of the on-screen display to be displayed (default: 30 sec) at menu "NET/USB" (☞ [page 74](#)). When the display is off, you can press  $\Delta$ / $\nabla$ / $\triangleleft$   $\triangleright$  to return to the previous screen.
- Use **STATUS** on the main unit to switch between displaying the title name, artist name or album name.

## Playing files that have been preset or registered in your favorites

Favorites are listed at the top of the menu screen, so when a station is registered as a favorite it can be tuned in easily.

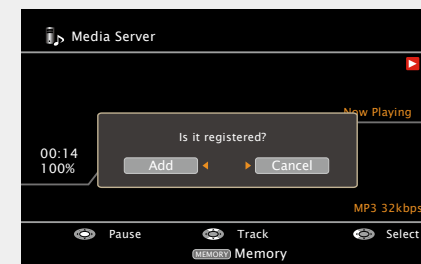
### 1 While a file you want to register as a favorite is being played back, press MEMORY.

### 2 Press $\Delta$ / $\nabla$ to select "Favorites", then press ENTER.



### 3 Press $\triangleleft$ to select "Add".

The file is registered as a favorite.



- If you do not want to register it as a favorite, press  $\triangleleft$ .

### ❑ Listening to music file registered in your favorites

**1** Press **SOURCE SELECT** to display the “Source Select” menu, then select “Favorites” (☞ [page 19](#)).

**2** Press  $\Delta/\nabla$  to select a file and press **ENTER** or  $\triangleright$ .  
This unit automatically connects to the media server and starts playback.

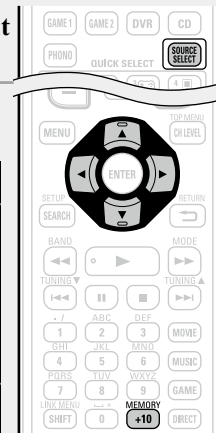
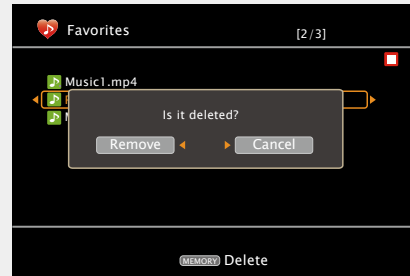


### ❑ Clearing music file from your favorites

**1** Press **SOURCE SELECT** to display the “Source Select” menu, then select “Favorites” (☞ [page 19](#)).

**2** Press  $\Delta/\nabla$  to select a file you want to delete and press **MEMORY**.

**3** Press  $\triangleleft$  to select “Remove”.  
The selected file is deleted.



• If you do not want to delete the file, press  $\triangleright$ .

#### NOTE

- Presettings are erased by overwriting them.
- When the operations described below is performed, the media server’s database is updated and it may no longer be possible to play preset or favorite music files.
  - When you quit the media server and then restart it.
  - When music files are deleted or added on the media server.
- When using an ESCIENT server, place “ESCIENT” before the server name.

## Media server operation



Operation buttons	Function
<b>CH +, -</b>	Preset channel (A1 – G8) selection
<b>MENU</b>	Amp menu
△▽◀▶	Cursor operation / Auto search (cue, △▽)
<b>ENTER</b> (Press and release)	Enter / Pause
<b>ENTER</b> (Press and hold)	Stop
<b>SEARCH</b>	Page search*1 / Character sort*2
<b>RETURN</b> ↵	Return
▶	Playback / Pause
⏮ ⏪ ⏩ ⏭	Auto search (cue)
⏸	Pause
■	Stop
<b>1 – 8</b>	Preset channel selection
<b>SHIFT</b>	Preset channel block selection
<b>MEMORY</b>	Favorites / Preset memory registration
<b>TV I / ⏻</b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)

- Repeat playback (☞ [page 81](#) “Repeat”)
- Random playback (☞ [page 81](#) “Random”)\*3
- Slide show playback (☞ [page 81](#) “Slide Show”)

- \*1 When the menu screen is displayed, press **SEARCH**, then press ◀ (previous page) or ▶ (next page).  
To cancel, press △▽ or **SEARCH** twice.
- \*2 When the menu screen is displayed, press **SEARCH** twice, then press ◀▶ to select the first letter you want to search mode.  
• If it is not possible to search the list, “unsorted list.” is displayed.  
To cancel, press △▽ or **SEARCH**.
- \*3 When playing files stored on a computer using the random play function, when a track has finished playing, the next track is selected at random from all of the tracks on the computer. For this reason, the same track may be played back to back.



If the list is not in alphabetical order, you may not be able to perform a character sort.

# Playing a USB memory device

Playing back music or still picture (JPEG) files recorded on a USB memory device.

## Important information

### USB memory devices

A USB memory device can be connected to the USB port of this unit to play music and still picture (JPEG) files stored on the USB memory device.

Also, files stored on an iPod can be played when the iPod is connected directly to the USB port of this unit. See "Connect an iPod directly to the USB port to play back" (page 23).

- Only USB memory devices conforming to mass storage class and MTP (Media Transfer Protocol) standards can be played on this unit.
- This unit is compatible with USB memory devices in "FAT16" or "FAT32" format.

### Album art function

When an MP3 music file includes album art data, the album art can be displayed while playing the file.

### Slide show function

Still picture (JPEG) files stored on USB memory devices can be played as slide shows.

Also, you can set the time display that is shown during playback (page 81).

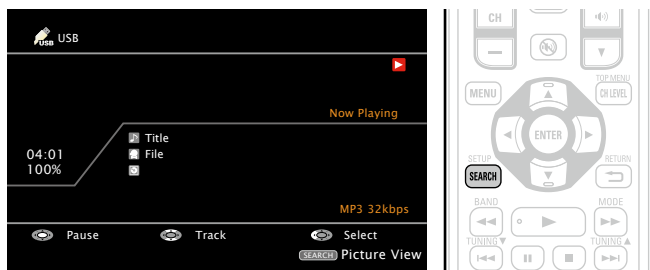


This unit plays back image (JPEG) files in the orientation in which they are stored in the folder.

### Function that simultaneously plays back music and image files from the network

You can playback music and image files at the same time by playing back music files, and then playing back image files.

Also, when selecting music files after playing back image files, press **SEARCH** when the music playback screen is displayed. Music files and image files can be played back simultaneously. At this time, set "Slide Show" (page 81) in the menu to "ON".



Network contents that can be played back simultaneously are as follows.

- Music files: Favorites, Media Server, USB, iPod Browse Mode (NET/USB)
- Image files: Media Server, USB

### [Compatible formats]

	USB memory devices *1
<b>WMA</b> (Windows Media Audio)	✓*2
<b>MP3</b> (MPEG-1 Audio Layer-3)	✓
<b>WAV</b>	✓
<b>MPEG-4 AAC</b>	✓*3
<b>FLAC</b> (Free Lossless Audio Codec)	✓
<b>JPEG</b>	✓

\*1 USB

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit can show the artwork that was embedded by using MP3 ID3-Tag Ver. 2.3 or 2.4.
- This unit is compatible with WMA META tags.
- WAV format Quantization bit rate: 16 bits
- FLAC format Quantization bit rate: 16 or 24 bits

\*2 Copyright-protected files can be played on certain portable players compatible with MTP.

\*3 Only files that are not protected by copyright can be played on this unit.

Content downloaded from pay sites on the Internet are copyright protected. Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.

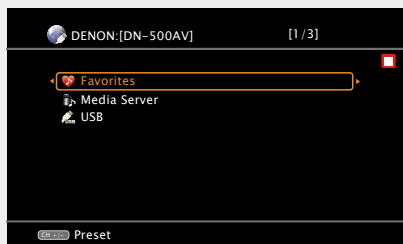
### [Compatible formats]

	Sampling frequency	Bit rate	Extension
<b>WMA</b> (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
<b>MP3</b> (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
<b>WAV</b>	32/44.1/48 kHz	–	.wav
<b>MPEG-4 AAC</b>	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4
<b>FLAC</b> (Free Lossless Audio Codec)	32/44.1/48/88.2/96 kHz	–	.flac

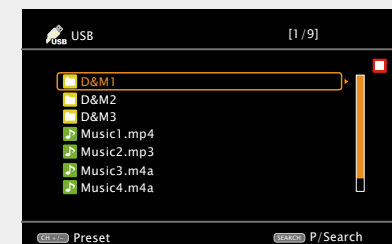
## Playing files stored on USB memory devices

**1** Connect the USB memory device to the USB port (☞ [page 13](#) “Connecting an iPod or USB memory device to the USB port”).

**2** Press **NET/USB** to switch the input source to “NET/USB”.



**3** Use  $\Delta$ / $\nabla$  to select “USB”, then press **ENTER** or  $\triangleright$ .



• Selecting “USB/iPod” in the “Source Select” menu, lets you directly select “USB”.

**4** Press  $\Delta$ / $\nabla$  to select the search item or folder, then press **ENTER** or  $\triangleright$ .

**5** Press  $\Delta$ / $\nabla$  to select the file, then press **ENTER**,  $\triangleright$  or  $\blacktriangleright$ .  
Playback starts.



- You can specify the duration of the on-screen display to be displayed (default: 30 sec) at menu “NET/USB” (☞ [page 74](#)). When the display is off, you can press  $\Delta$ / $\nabla$ / $\triangleleft$ / $\triangleright$  to return to the previous screen.
- To play back compressed audio with extended bass or treble reproduction, we recommend playback in RESTORER mode (☞ [page 62](#)). The default setting is “Mode3”.
- If the USB memory device is divided into multiple partitions, only the top partition can be selected.
- This unit is compatible with MP3 files conforming to “MPEG-1 Audio Layer-3” standards.

### NOTE

- Note that D&M will accept no responsibility whatsoever for any problems arising with the data on a USB memory device when using this unit in conjunction with the USB memory device.
- USB memory devices will not work via a USB hub.
- D&M does not guarantee that all USB memory devices will operate or be supplied power. When using a USB portable hard disk that can draw power from an AC adapter, we recommend using the AC adapter.
- It is not possible to connect and use a computer via the USB port of this unit using a USB cable.

## □ USB operation



Operation buttons	Function
<b>CH +, -</b>	Preset channel (A1 – G8) selection
<b>MENU</b>	Amp menu
△▽◀▶	Cursor operation / Auto search (cue, △▽)
<b>ENTER</b> (Press and release)	Enter / Pause
<b>ENTER</b> (Press and hold)	Stop
<b>SEARCH</b>	Page search*1 / Character sort*2
<b>RETURN</b> ↵	Return
▶	Playback / Pause
⏮ ⏪ ⏩ ⏭	Auto search (cue)
⏸	Pause
■	Stop
<b>1 – 8</b>	Preset channel selection
<b>SHIFT</b>	Preset channel block selection
<b>TV I / ⏻</b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)

- **Repeat playback** (🔗 [page 81](#) "Repeat")
- **Random playback** (🔗 [page 81](#) "Random")\*3
- **Slide show playback** (🔗 [page 81](#) "Slide Show")

- \*1 When the menu screen is displayed, press **SEARCH**, then press ◀ (previous page) or ▶ (next page).  
To cancel, press △▽ or **SEARCH** twice.
- \*2 When the menu screen is displayed, press **SEARCH** twice, then press ◀▶ to select the first letter you want to search mode.  
• If it is not possible to search the list, "unsorted list." is displayed.  
To cancel, press △▽ or **SEARCH**.
- \*3 When playing files stored on a USB memory device using the random play function, when a track has finished playing, the next track is selected at random from all of the tracks on the device.  
For this reason, the same track may be played back to back.



If the list is not in alphabetical order, you may not be able to perform a character sort.

# Selecting a listening mode (Surround mode)

This unit can play input audio signals in multi-channel surround mode or in stereo mode.

Select a listening mode suitable for the playback contents (cinema, music, etc.) or according to your liking.

## Selecting a listening mode

**1** Play the selected device  
(page 20 – 30).

**2** Press **MOVIE**, **MUSIC**, **GAME** or **DIRECT** to select a listening mode.

• Each time **MOVIE**, **MUSIC** or **GAME** is pressed, the listening mode is switched.

**MOVIE** Switches to the listening mode suitable for movies and TV programs.

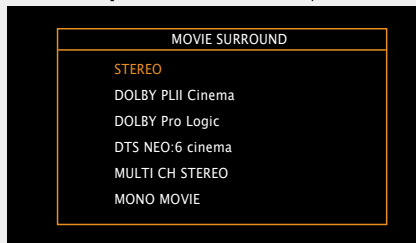
**MUSIC** Switches to the listening mode suitable for music.

**GAME** Switches to the listening mode suitable for games.

**DIRECT** Switches the listening mode to Direct or Pure Direct mode. In Direct mode, the audio is played back exactly how it was recorded.

• Pressing **MOVIE**, **MUSIC** or **GAME** displays a list of the surround modes that can be selected on the TV screen. While the list is displayed, you can also use  $\Delta$ / $\nabla$  to select a surround mode.

**[Example]** When **MOVIE** is pressed



### Listening mode

- The following listening modes can be selected using the **MOVIE**, **MUSIC**, **GAME**, and **DIRECT** buttons.
- Adjust the sound field effect with the menu "Surr.Parameter" (page 60).

Operation button	Input signal	Listening mode	
<b>MOVIE</b>	2-channel *1	STEREO	
		DOLBY PLIIx Cinema *2	
		DOLBY PLII Cinema *2	
		DOLBY Pro Logic *2	
		DTS NEO:6 Cinema *2	
		DOLBY PLIIz Height *2	
		MULTI CH STEREO	
		MONO MOVIE	
		VIRTUAL	
		Multi-channel *3	Dolby Digital
	DOLBY DIGITAL EX		
	Dolby TrueHD		DOLBY DIGITAL + PLIIx Cinema
			DOLBY DIGITAL + PLIIz
			DOLBY TrueHD
	Dolby Digital Plus		DOLBY TrueHD + EX
			DOLBY TrueHD + PLIIx Cinema
			DOLBY TrueHD + PLIIz
	DTS		DOLBY DIGITAL Plus
			DOLBY DIGITAL Plus + EX
		DOLBY DIGITAL Plus + PLIIx Cinema	
DOLBY DIGITAL Plus + PLIIz			
DTS-HD / DTS Express	DTS SURROUND		
	DTS ES DSCRT 6.1		
	DTS ES MTRX 6.1		
	DTS 96/24		
	DTS + NEO:6		
	DTS + PLIIx Cinema		
	DTS + PLIIz		
DTS-HD / DTS Express	DTS-HD HI RES		
	DTS-HD MSTR		
	DTS Express		
	DTS-HD + NEO:6		
	DTS-HD + PLIIx Cinema		
DTS-HD + PLIIz			

Operation button	Input signal	Listening mode
<b>MOVIE</b>	PCM multi-channel	MULTI CH IN
	Multi-channel *3	MULTI CH IN 7.1
MULTI IN + Dolby EX		
MULTI IN + PLIIx Cinema		
MULTI IN + PLIIz		
MULTI CH STEREO		
MONO MOVIE		
VIRTUAL		

\*1 2-channel also includes analog input.

\*2 This mode plays back 2-channel source in 5.1 or 7.1-channel playback. It cannot be selected when only front speakers are used.

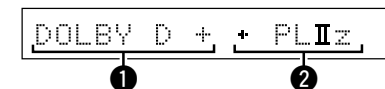
\*3 Some listening modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding surround modes" (page 119).

Operation button	Input signal	Listening mode	
<b>MUSIC</b>	2-channel *1	STEREO	
		DOLBY PLIIx Music *2	
		DOLBY PLII Music *2	
		DTS NEO:6 Music *2	
		DOLBY PLIIz Height *2	
		MULTI CH STEREO	
		ROCK ARENA	
		JAZZ CLUB	
		MATRIX	
	Multi-channel *3	STEREO	
		Dolby Digital	DOLBY DIGITAL
			DOLBY DIGITAL EX
	DOLBY DIGITAL + PLIIx Music		
	Dolby TrueHD	DOLBY DIGITAL + PLIIz	
		DOLBY TrueHD	
		DOLBY TrueHD + EX	
	Dolby Digital Plus	DOLBY TrueHD + PLIIx Music	
		DOLBY TrueHD + PLIIz	
		DOLBY DIGITAL Plus	
	DTS	DOLBY DIGITAL Plus + EX	
		DOLBY DIGITAL Plus + PLIIx Music	
		DOLBY DIGITAL Plus + PLIIz	
		DTS SURROUND	
		DTS ES DSCRT 6.1	
		DTS ES MTRX 6.1	
	DTS-HD / DTS Express	DTS 96/24	
		DTS + NEO:6	
		DTS + PLIIx Music	
		DTS + PLIIz	
		DTS-HD HI RES	
		DTS-HD MSTR	
	PCM multi-channel	DTS Express	
		DTS-HD + NEO:6	
DTS-HD + PLIIx Music			
DTS-HD + PLIIz			
Multi-channel *3	MULTI CH IN		
	MULTI CH IN 7.1		
	MULTI IN + Dolby EX		
	MULTI IN + PLIIx Music		
	MULTI IN + PLIIz		
	MULTI CH STEREO		
Multi-channel *3	ROCK ARENA		
	JAZZ CLUB		
	MATRIX		
	VIRTUAL		

Operation button	Input signal	Listening mode	
<b>GAME</b>	2-channel *1	STEREO	
		DOLBY PLIIx Game *2	
		DOLBY PLII Game *2	
		DOLBY PLIIz Height *2	
		MULTI CH STEREO	
		VIDEO GAME	
	Multi-channel *3	Dolby Digital	STEREO
			DOLBY DIGITAL
		Dolby TrueHD	DOLBY DIGITAL EX
			DOLBY DIGITAL + PLIIz
		Dolby Digital Plus	DOLBY TrueHD
			DOLBY TrueHD + EX
		Dolby Digital Plus	DOLBY TrueHD + PLIIz
			DOLBY DIGITAL Plus
		Dolby Digital Plus	DOLBY DIGITAL Plus + EX
			DOLBY DIGITAL Plus + PLIIz
		DTS	DOLBY DIGITAL Plus + EX
			DOLBY DIGITAL Plus + PLIIz
	DTS SURROUND		
	DTS ES DSCRT 6.1		
	DTS ES MTRX 6.1		
	DTS 96/24		
	DTS-HD / DTS Express	DTS + NEO:6	
		DTS + PLIIz	
		DTS-HD HI RES	
		DTS-HD MSTR	
	PCM multi-channel	DTS Express	
DTS-HD + NEO:6			
DTS-HD + PLIIz			
Multi-channel *3	DTS-HD + PLIIx Music		
	DTS-HD + PLIIz		
<b>DIRECT</b>	All	MULTI CH IN	
	All	MULTI CH IN 7.1	
<b>DIRECT</b>	All	MULTI IN + Dolby EX	
	All	MULTI IN + PLIIz	
<b>DIRECT</b>	All	MULTI CH STEREO	
	All	VIDEO GAME	
<b>DIRECT</b>	All	VIRTUAL	
	All	DIRECT	
<b>DIRECT</b>	All	PURE DIRECT	

- \*1 2-channel also includes analog input.
- \*2 This mode plays back 2-channel source in 5.1 or 7.1-channel playback. It cannot be selected when only front speakers are used.
- \*3 Some listening modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding surround modes" (page 119).

### Views on the TV screen or display



- 1 Shows a decoder to be used.
  - A DOLBY DIGITAL Plus decoder is displayed as "DOLBY D +".
- 2 Shows a decoder that creates sound output from the surround back speakers.
  - "+ PLIIz" indicates the front height sound from front height speakers.



□ **Description of listening mode types**

**Dolby listening mode**

Listening mode type	Description
DOLBY PLIIx*1	This mode can be selected when a Dolby Pro Logic IIx decoder is used to play back 2-channel source in 6.1/7.1-channel surround sound including the surround back channel. By adding the surround back channel, a stronger surround feeling is obtained compared to Dolby Pro Logic II. There are three playback modes: "Cinema" mode that is optimized for movie playback, "Music" mode that is optimized for music playback, and "Game" mode that is optimized for game play.
DOLBY PLII	This mode can be selected when a Dolby Pro Logic II decoder is used to play back 2-channel source in 5.1-channel surround sound with a natural, realistic feel.
DOLBY Pro Logic	This mode can be selected when a DOLBY Pro Logic decoder is used to play back 2-channel source in 4.1-channel surround sound (Left/Center/Right/Surround Mono).
DOLBY PLIIz*2	This mode can be selected when a Dolby Pro Logic IIz decoder is used to play back 2-channel source in 7.1-channel surround sound with added front height channel. By adding a front height channel, the vertical expression is emphasized, improving the three-dimensionality of the sound.
DOLBY DIGITAL	This mode can be selected when playing sources recorded with Dolby Digital.
DOLBY DIGITAL EX*1	This mode improves the depth, dimension, and expressiveness of the sound stage by sound field playback including surround back channels.
DOLBY TrueHD	This mode can be selected when playing sources recorded in Dolby TrueHD.
DOLBY DIGITAL Plus	This mode can be selected when playing sources recorded with Dolby Digital Plus.

\*1 This can be selected when "Speaker Config." – "S.Back" is not set to "None".

\*2 This can be selected when "Speaker Config." – "F.Height" is not set to "None".

**DTS listening mode**

Listening mode type	Description
DTS NEO:6	This mode can be selected when a DTS NEO:6 decoder is used to play back 2-channel source in 6.1/7.1-channel surround sound including the surround back channel. There is a "Cinema" mode optimized for movie playback, and a "Music" mode optimized for music playback.
DTS SURROUND	This mode can be selected when playing sources recorded in DTS.
DTS ES DSCRT6.1*	This mode can be selected when playing sources recorded in DTS-ES. Provides optimum playback of DTS-ES Discrete signals using surround back.
DTS ES MTRX6.1*	This mode can be selected when playing sources recorded in DTS-ES. Surround back channel data encoded in DTS-ES Matrix recording software is played from the surround back channel.
DTS 96/24	This mode can be selected when playing sources recorded in DTS 96/24.
DTS-HD	This mode can be selected when playing sources recorded in DTS-HD.
DTS Express	This mode can be selected when playing sources recorded in DTS Express.

\* This can be selected when "Speaker Config." – "S.Back" is not set to "None".

**PCM multi-channel listening mode**

Listening mode type	Description
MULTI CH IN	This mode can be selected when playing multi-channel PCM sources .

## Other surround mode

Listening mode type	Description
MULTI CH STEREO	This mode reproduces stereo sound from all speakers. The same sound as that from the front speakers (L/R) is played back at the same level from the surround speakers (L/R) and surround back speakers (L/R).
ROCK ARENA	This mode creates the atmosphere of a live concert in an arena.
JAZZ CLUB	This mode creates the atmosphere of a live concert in a jazz club.
MONO MOVIE	This mode is for playing monaural movie sources with surround sound. When playing sources recorded in monaural in the "MONO MOVIE" mode, the sound will be off balance with a single channel (left or right), so input to both channels.
VIDEO GAME	This mode is suited for achieving surround sound with video games.
MATRIX	This mode lets you add a spacious feel to stereo music sources.
VIRTUAL	This mode creates surround effects using only the front speakers or headphones.

## STEREO listening mode

Listening mode type	Description
STEREO	This is the mode for playing in stereo. The tone can be adjusted. <ul style="list-style-type: none"> <li>• Sound is output from the front left and right speakers and subwoofer.</li> <li>• If multichannel signals are input, they are mixed down to 2-channel audio and are played.</li> </ul>

## Direct listening mode

Listening mode type	Description
DIRECT	Sound recorded in source is played as is.
PURE DIRECT	This mode is for playback in higher sound quality than in "Direct playback" mode. Turn the display of the amplifier off to stop the analogue video circuit. This suppresses the source of noise that affects sound quality.



In Direct listening mode, the following items cannot be adjusted.

- Tone ([page 62](#))
- RESTORER ([page 62](#))






### NOTE

- Video signals are only output when HDMI signals are played in the PURE DIRECT mode.
- When in the PURE DIRECT mode, the menu screen is not displayed.


## Advanced version

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Here, we explain functions and operations that let you make better use of this unit.

- **Speaker installation/connection (Advanced connection)**  [page 38](#)
- **Playback (Advanced operation)**  [page 46](#)
- **Playback in ZONE2 (Separate room)**  [page 51](#)
- **How to make detailed settings**  [page 54](#)
- **Operating the connected devices by remote control unit**  [page 82](#)

# Speaker installation/connection (Advanced connection)

Here we describe the installation, connection and setup methods for speakers other than 5.1-channel speakers. For the installation, connection and setup methods for 5.1-channel speakers, see  page 4 "Setup Wizard".


## Procedure for speaker settings

Install



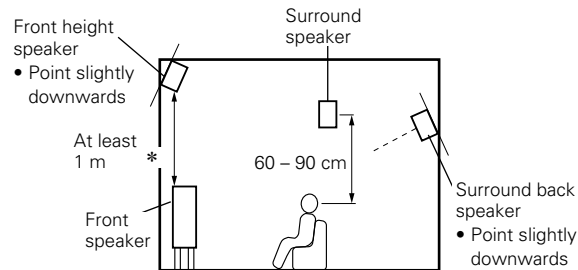
Connect ( page 40)

## Install

This unit is compatible with Dolby Pro Logic IIz ( page 122), which offers an even wider and deeper surround sensation. When using Dolby Pro Logic IIz, install front height speakers.



Install the surround back speakers in a position 60 to 90 cm higher than ear level.



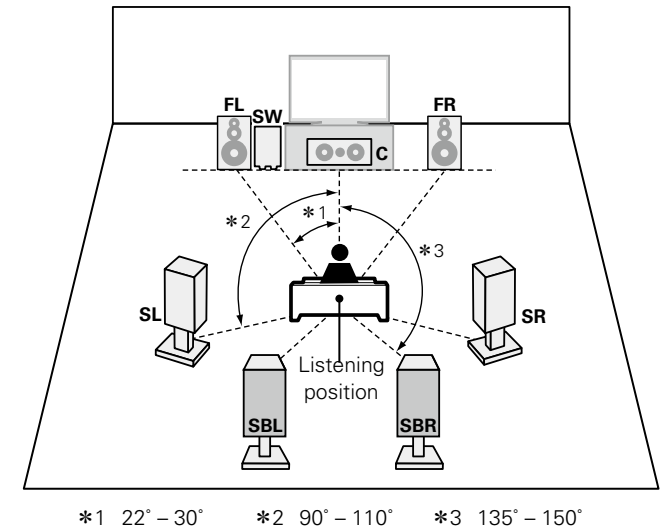
[Viewed from the side]

\* Recommended for Dolby Pro Logic IIz

### NOTE

It is not possible to use the surround back speakers and front height speakers simultaneously.

## When 7.1ch (Surround back speaker) installed

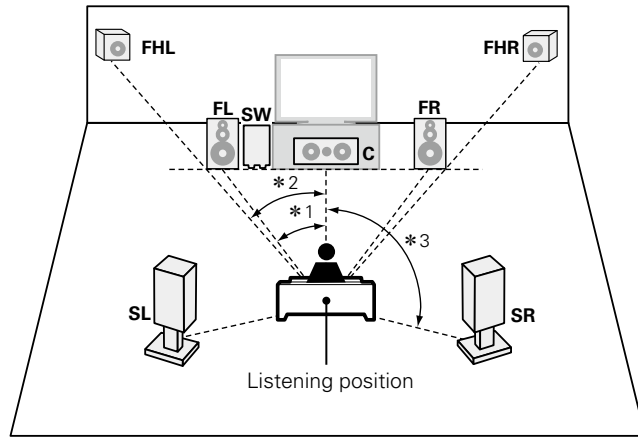


\*1 22° - 30°    \*2 90° - 110°    \*3 135° - 150°

### [Speaker abbreviations]

- |                             |                                      |
|-----------------------------|--------------------------------------|
| <b>FL</b> Front speaker (L) | <b>SL</b> Surround speaker (L)       |
| <b>FR</b> Front speaker (R) | <b>SR</b> Surround speaker (R)       |
| <b>C</b> Center speaker     | <b>SBL</b> Surround back speaker (L) |
| <b>SW</b> Subwoofer         | <b>SBR</b> Surround back speaker (R) |

**When 7.1ch (Front height speaker) installed**

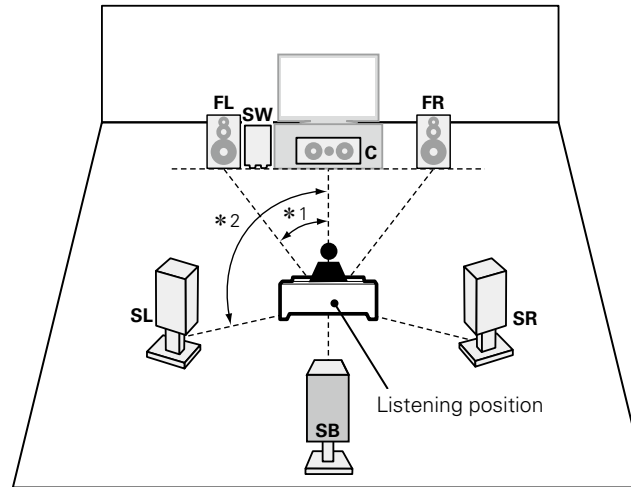


\*1 22° - 30°    \*2 22° - 45°    \*3 90° - 110°

**[Speaker abbreviations]**

- |                             |                                     |
|-----------------------------|-------------------------------------|
| <b>FL</b> Front speaker (L) | <b>SL</b> Surround speaker (L)      |
| <b>FR</b> Front speaker (R) | <b>SR</b> Surround speaker (R)      |
| <b>C</b> Center speaker     | <b>FHL</b> Front height speaker (L) |
| <b>SW</b> Subwoofer         | <b>FHR</b> Front height speaker (R) |

**When 6.1ch (Surround back speaker) installed**

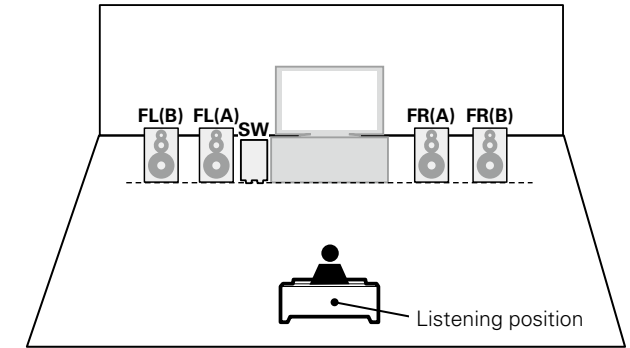


\*1 22° - 30°    \*2 90° - 110°




**[Speaker abbreviations]**

- |                             |                                 |
|-----------------------------|---------------------------------|
| <b>FL</b> Front speaker (L) | <b>SL</b> Surround speaker (L)  |
| <b>FR</b> Front speaker (R) | <b>SR</b> Surround speaker (R)  |
| <b>C</b> Center speaker     | <b>SB</b> Surround back speaker |
| <b>SW</b> Subwoofer         |                                 |

**When Front A/B speakers installed**



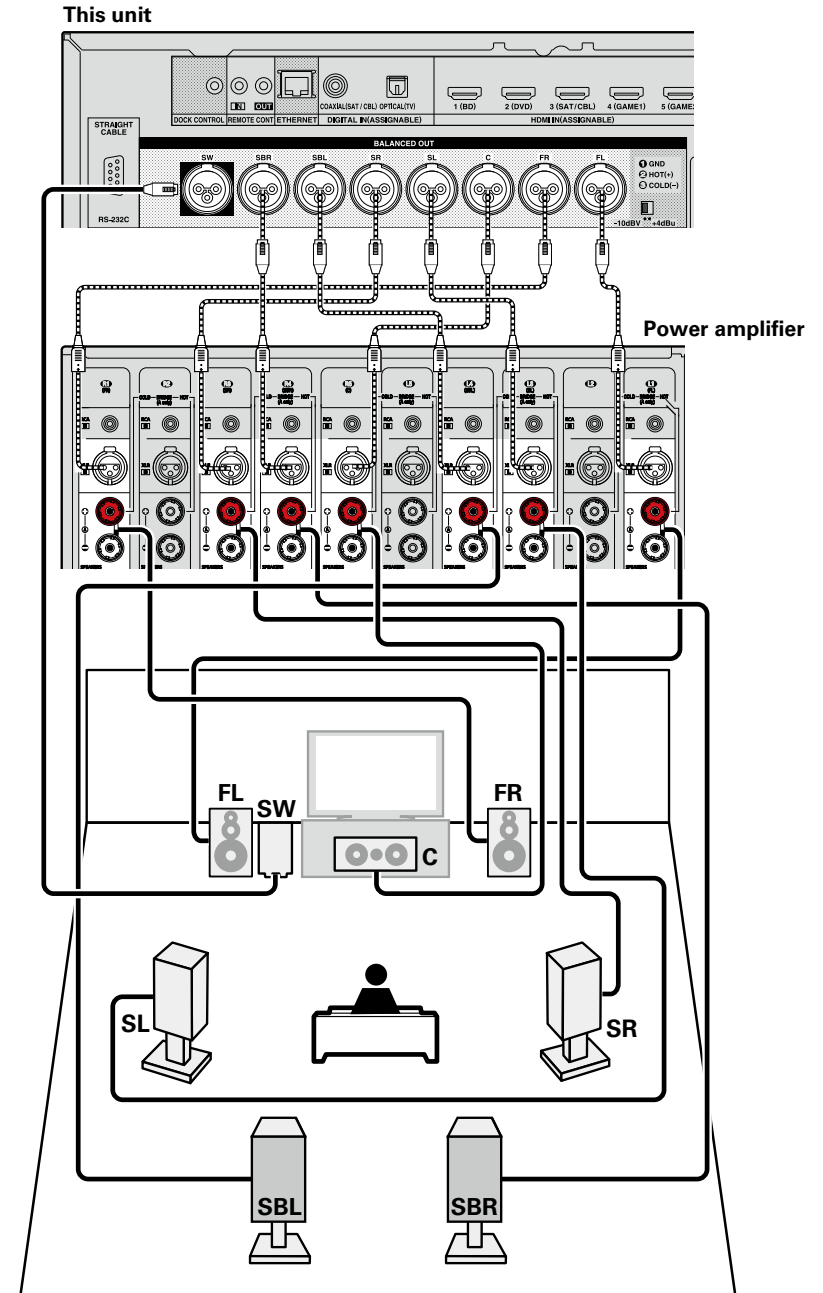
## Connect

- For the method of connecting 5.1-channel speakers, see  page 6 “Connecting a power amplifier”.
- For the method of connecting the TV, see  page 3 “Connect this unit to the television using an HDMI cable (sold separately)”.
- Switch the output voltage with the output level selector according to the connected power amplifier ( page 6).

### 7.1-channel (Surround back speaker) connection

The illustration on the right shows a connection example for performing 7.1-channel playback using the surround back speakers.

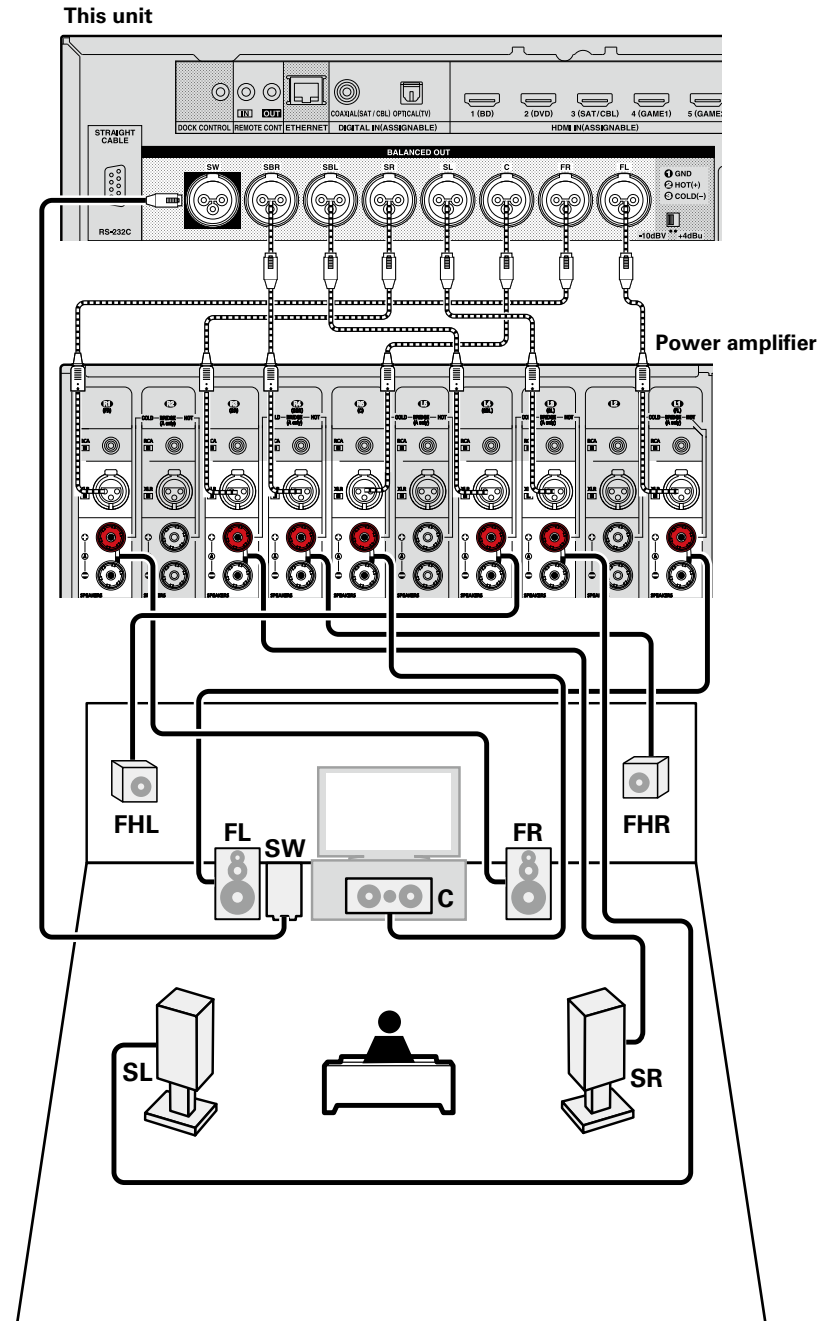
If you connect the surround back and front height speakers before you start playback, the audio is played back by automatically switching the speakers in accordance with the surround mode or input signals.



### 7.1-channel (Front height speaker) connection

The illustration on the right shows a connection example for performing 7.1-channel playback using the front height speakers.

If you connect the surround back and front height speakers before you start playback, the audio is played back by automatically switching the speakers in accordance with the surround mode or input signals.

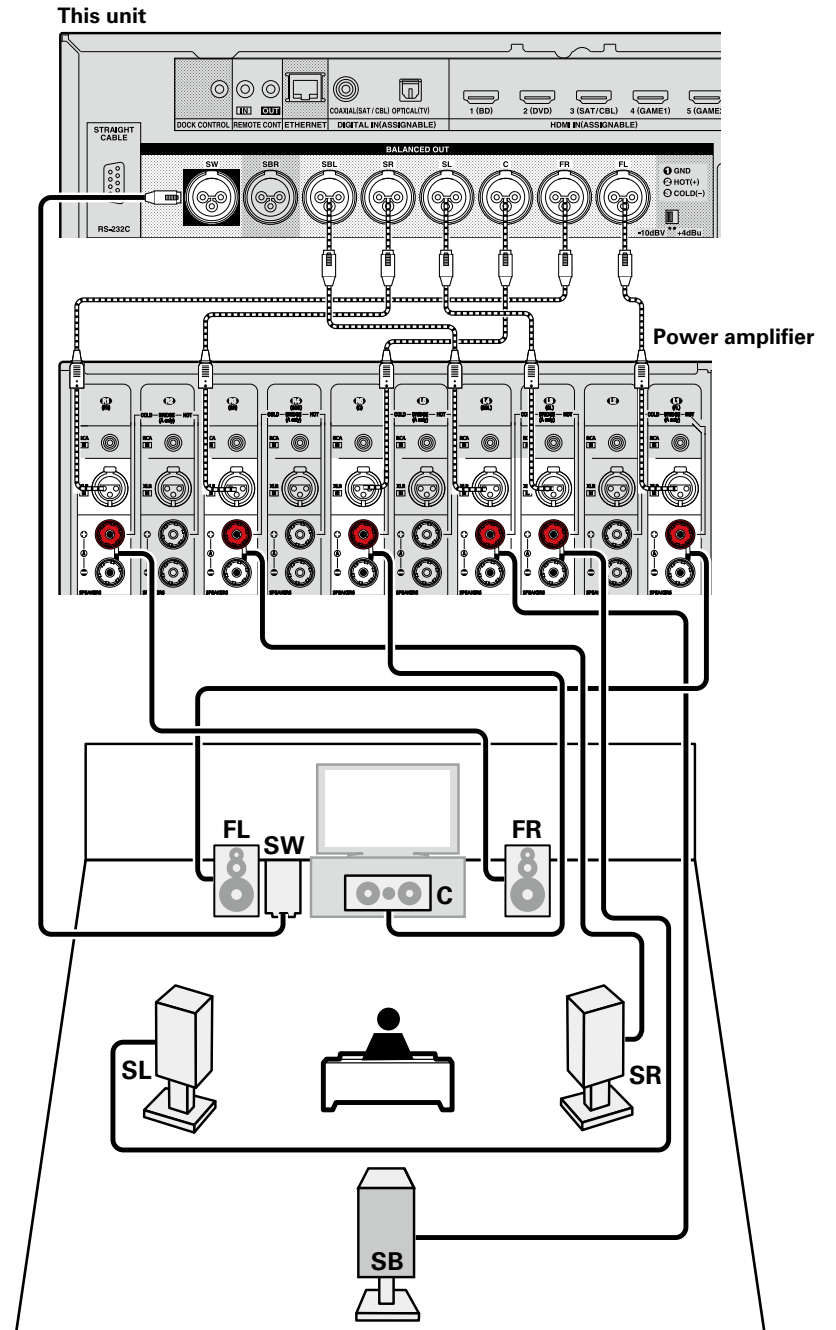


### 6.1-channel (Surround back speaker) connection

If using only one surround back speaker (with a 6.1-channel connection), connect to the "L" side of the SURR. BACK/AMP ASSIGN terminal.

For speaker settings in this case, see "When 6.1ch (Surround back speaker) installed" ([page 39](#)).

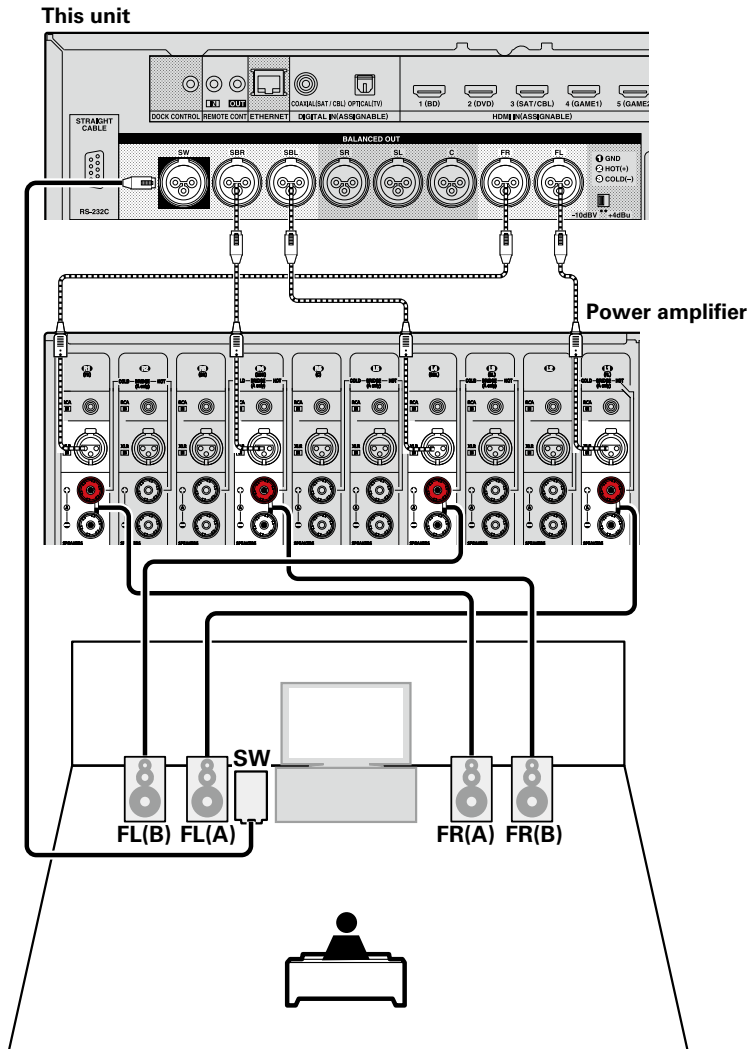
Also use the "Speaker Config." setting ([page 65](#)) to set "S.Back" to "1spkr".





### Front A/B connection

You can use a second set of front speakers for playback.

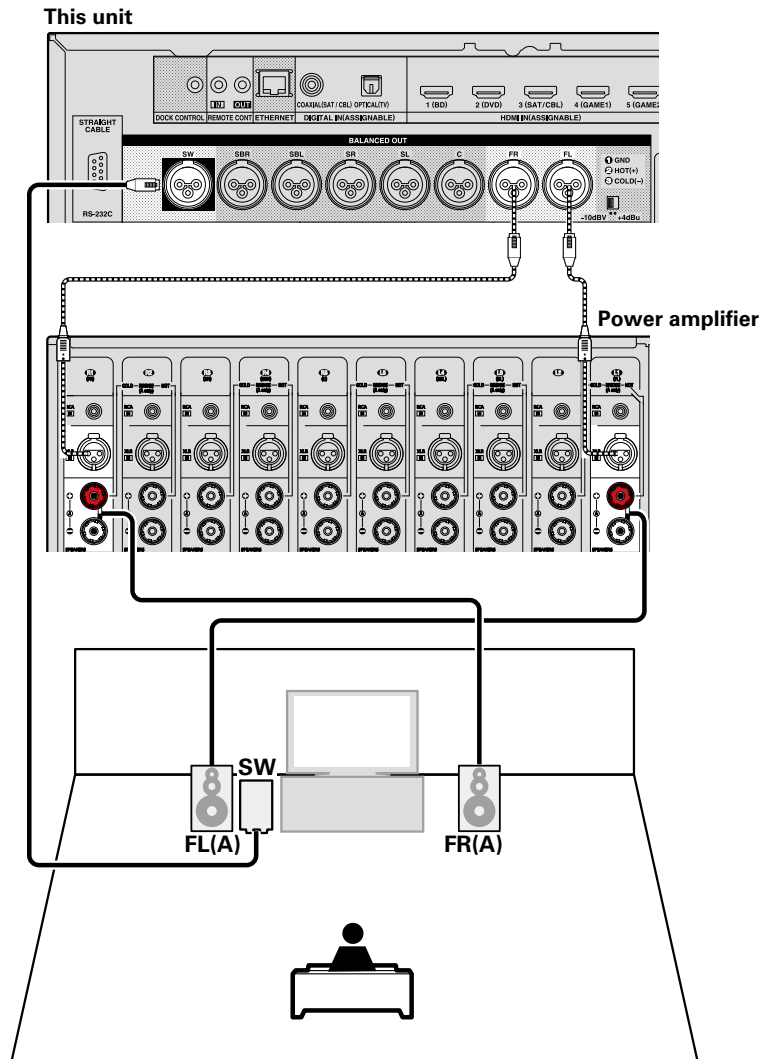


- For surround playback of a multichannel source, if you connect the center speaker, surround speakers and subwoofers, 5.1-channel playback is available.
- Front speakers can be used separately, depending on the speaker's specifications or playback source such as front speakers (A) for multichannel playback and front speakers (B) for 2-channel playback (page 67 "Front Sp Setup").

#### NOTE

For speaker cable connections, see page 6 "Connecting a power amplifier".

## 2.1-channel connection



**NOTE**

For speaker cable connections, see  page 6 "Connecting a power amplifier".

## Bi-Amp connection

You can use the front speakers via the bi-amp connection.

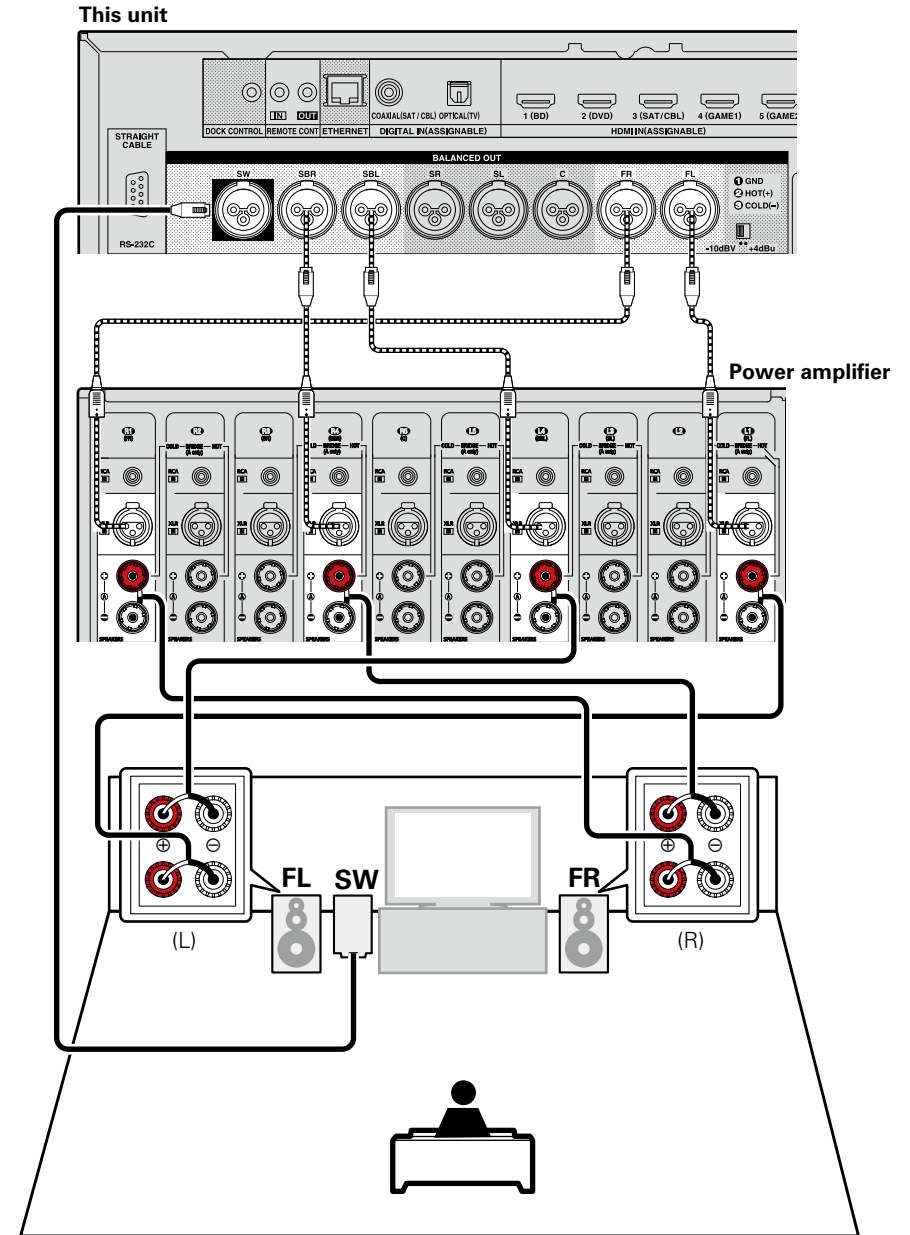
A bi-amp connection is to connect separate amplifiers to the tweeter terminals and woofer terminals of speakers compatible with the bi-amp function. This prevents the back electromotive force (returned force without output) of the woofer sent to the tweeter, which affects the sound quality of the tweeter.



For surround playback of a multichannel source, if you connect the center speaker, surround speakers and subwoofers, 5.1-channel playback is available.

### NOTE

- For speaker cable connections, see [page 6](#) “Connecting a power amplifier”.
- Use speakers compatible with bi-amp connections.
- When making bi-amp connections, be sure to remove the short-circuiting plate or wire between the speaker’s woofer and tweeter terminals.



# Playback (Advanced operation)

Settings (👉 page 18)

Playback (Basic operation) (👉 page 19)

Selecting a listening mode (Surround mode)  
(👉 page 33)

❑ HDMI control function (👉 page 46)

❑ Sleep timer function (👉 page 47)

❑ Adjusting the volume of the speakers  
(👉 page 48)

❑ Quick select function (👉 page 49)

❑ Various memory functions (👉 page 50)

## Convenient functions

### HDMI control function

If you connect the unit and an HDMI control function compatible TV or player with an HDMI cable and then enable the HDMI control function setting on each device, the devices will be able to control each other.

#### ❑ Operations possible by HDMI control

- This unit power off can be linked to the TV power off step.
- You can switch audio output devices with a TV operation.  
When you set "Output audio from amp" in the TV audio output setup operation, you can switch the amp power on.
- You can adjust this unit volume in the TV volume adjustment operation.
- You can switch this unit input sources through linkage to TV input switching.
- When playing the player, this unit input source switches to the source for that player.
- If you switch the input source of the unit to "TV", you can play TV audio with this unit (👉 page 7 "About ARC (Audio Return Channel) function").
- When "HDMI Control" (👉 page 68) in the menu is set to "ON", signals input to the HDMI input connector are output to the television or other device connected to the HDMI output connector, even if the power of this unit is in standby (pass-through function).



- To play the audio of a TV that does not support the ARC function with the unit, connect the TV with an optical digital connection.
- To use the pass-through function, connect an HDMI connection device that is compatible with HDMI control.

#### ❑ Setting procedure

- 1 Set the HDMI output connector corresponding with the HDMI control function.**  
Set "HDMI Control" (👉 page 68) to "ON".
- 2 Turn the power on for all the devices connected by HDMI cable.**
- 3 Set the HDMI control function for all devices connected by HDMI cable.**
  - Please consult the operating instructions for the connected devices to check the settings.
  - Carry out steps 2 and 3 should any of the devices be unplugged.
- 4 Switch the television input to the HDMI input connected to this unit.**
- 5 Switch this unit input to the HDMI input source and check if the picture from the player is ok.**
- 6 When you turn the TV's power to standby, check that the power of this unit also goes to standby.**



If the HDMI control function does not operate properly, check the following points.

- Is the TV or player compatible with the HDMI control function?
- Is "HDMI Control" (👉 page 68) set to "ON"?
- Is "P.Off Control" (👉 page 68) set to "All" or "Video"?
- Are the HDMI control function settings of all devices correct?

**NOTE**

- When “HDMI Control” is set to “ON”, it consumes more standby power.
- The HDMI control function controls operations of a TV that is compatible with the HDMI control function. Make sure that the TV and HDMI are connected when you perform HDMI control.
- Some functions may not operate depending on the connected TV or player. Check the owner’s manual of each device for details beforehand.
- When “P.Off Control” on the menu is set to “OFF” ([page 68](#)), this unit is not set to standby even if the connected device is in the standby mode.
- When connection changes are implemented, such as adding connections to HDMI devices, linked operations may be initialized. In this case, you will need to reconfigure the settings.
- When “HDMI Control” is set to “ON”, it is not possible to assign an HDMI connector to “TV” at “Input Assign” ([page 78](#)).
- Should any of the operations below be performed, the interlocking function may be reset, in which case, repeat steps 2 and 3.
  - “Input Assign” – “HDMI” ([page 78](#)) setting has changed.
  - There is a change to the connection between the devices and the HDMI, or an increase in devices.

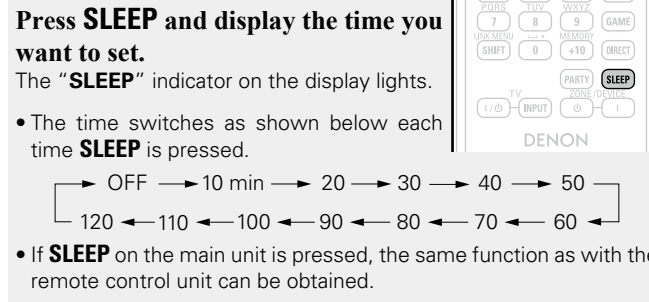
**Sleep timer function**

The power automatically goes into standby once the set time has elapsed.

This is convenient for playing sources while going to sleep.

**Press SLEEP and display the time you want to set.**  
The “SLEEP” indicator on the display lights.

- The time switches as shown below each time **SLEEP** is pressed.



- If **SLEEP** on the main unit is pressed, the same function as with the remote control unit can be obtained.

**To confirm the countdown time before putting the unit to sleep**

Press **SLEEP**.

“Sleep : \*min” appears on the display.

\* Countdown time

**To cancel the sleep timer**

Press **SLEEP** to set “OFF”.

The “SLEEP” indicator on the display turns off.



- The sleep timer setting is canceled if this unit’s power is set to standby.
- The sleep timer function can be set separately for the different zones ([page 53](#) “Sleep timer function”).

**NOTE**

The power of devices connected to this unit is not switched off by the sleep timer function. To turn off the power to connected devices, set the sleep timer functions on each of the connected devices.

## Adjusting the volume of the speakers

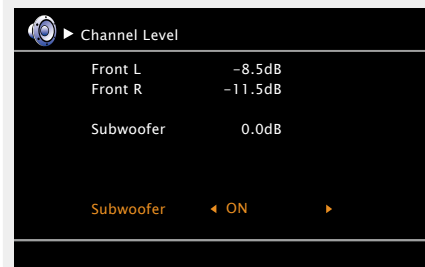
You can adjust the channel level either according to the playback sources or to suit your taste, as described below.

### Adjusting the volume of the different speakers

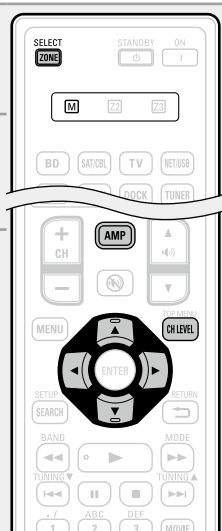
**1** Press **ZONE SELECT** to switch the zone mode to **[M]** (MAIN ZONE). The **[M]** indicator lights.

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

**3** Press **CH LEVEL**.

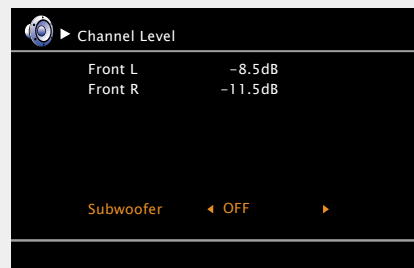


**4** Use **Δ∇** to select the speaker. The speaker that can be set switches each time one of the buttons is pressed.



**5** Use **◀▶** to adjust the volume.

- You can directly turn "OFF" the subwoofer outputs during 2-channel playback in DIRECT or STEREO mode. Select "Subwoofer" and use **◀▶** to select "ON" or "OFF".



When a headphone jack is inserted, the headphone channel level can be adjusted.

### Adjusting the volume of groups of speakers (Fader function)

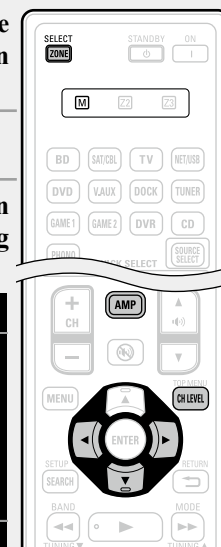
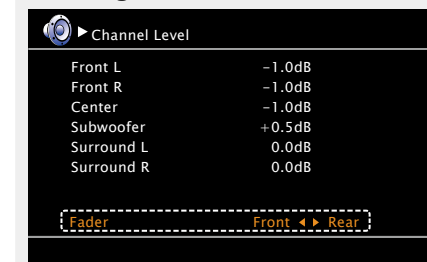
This function lets you adjust (fade) the sound all at once from the front (front speaker / front height speaker / center speaker) or rear (surround speaker / surround back speaker).

**1** Press **ZONE SELECT** to switch the zone mode to **[M]** (MAIN ZONE). The **[M]** indicator lights.

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

**3** Press **CH LEVEL**.

**4** Press **∇** to select "Fader", then select the item to be adjusting using **◀▶**.



**5** Use **◀▶** to adjust the volume of the speakers. (◀: front, ▶: rear)



- The fader function does not affect the subwoofer.
- The fader can be adjusted until the volume of the speaker is adjusted to the lowest value of -12 dB.

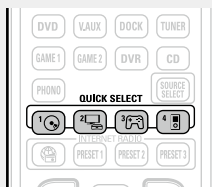
## Quick select function

All of the settings in step 1 can be memorized together. By memorizing frequently used settings, you can quickly access.

### ☐ Saving the settings

#### 1 Set the items below to the settings you want to save.

- ① Input source\* ([page 19](#))
- ② Volume ([page 20](#))
- ③ Surround mode ([page 33](#))
- ④ Video Select ([page 79](#))



\* The "NET/USB" source of MAIN ZONE can even memorize the menu screen of each content (Media Server, iPod/USB, etc.).

#### 2 Press and hold the desired QUICK SELECT until "Memory" appears on the display.

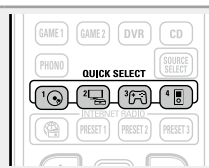
The current settings will be memorized.

[Quick select defaults]

	Input source	Volume
<b>QUICK SELECT 1</b>	BD	-40 dB
<b>QUICK SELECT 2</b>	SAT/CBL	-40 dB
<b>QUICK SELECT 3</b>	GAME1	-40 dB
<b>QUICK SELECT 4</b>	NET/USB (iPod/USB)	-40 dB

### ☐ Recalling the settings

Press **QUICK SELECT** at which the settings you want to call out are saved.



#### Naming quick select settings

See "Quick Sel.Name" ([page 74](#)).



- The Quick Select function can be set separately for the different zones ([page 53](#) "Quick select function").
- If **QUICK SELECT** on the main unit is pressed, the same function as with the remote control unit can be obtained.

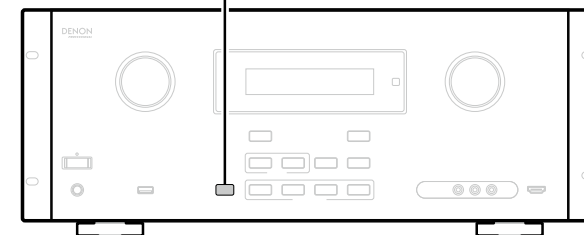
#### NOTE

Input sources stored with the quick select function cannot be selected if they have been deleted at "Source Delete" ([page 73](#)). In this case, store them again.

## Key lock function

To prevent accidental operation of this unit, you can disable operation of the buttons on the front panel.

### KEY LOCK



**Press and hold KEY LOCK for three seconds and longer.**  
"Panel lock:ON" appears on the display and buttons other than **ON/STANDBY** become unavailable for operation.

### ☐ Cancelling the key lock function

**While the key lock function is enabled, press and hold KEY LOCK for three seconds and longer.**

"Panel lock:OFF" appears on the display and the key lock function is cancelled.



While the key lock function is enabled, you can still operate this unit through the remote control, IP control, or RS-232C commands.

## Various memory functions

---

### ❑ Personal memory plus function

This function sets the settings (input mode, surround mode, HDMI output mode, audio delay etc.) last selected for the individual input sources.



The surround parameters, tone settings and the volumes of the different speakers are stored for the individual surround modes.

### ❑ Last function memory

This function stores the settings which were made before going into the standby mode.

When the power is turned back on, the settings are restored.



# Playback in ZONE2 (Separate room)

You can simultaneously play back the same source in both the MAIN ZONE and ZONE2. You can also play back separate sources in the MAIN ZONE and ZONE2.

## Audio output

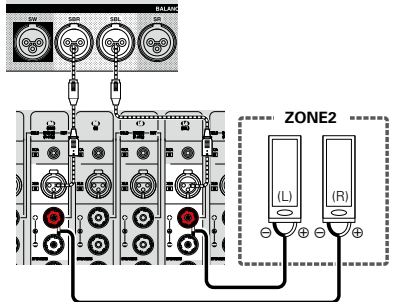
There are two methods to do this, as described below. Choose one of the methods.

- ① Zone playback by balanced output
- ② Zone playback by audio output  
Use an external amplifier.

### ① Zone playback by balanced output

The ZONE2 audio signals are output from the unit's surround back terminals using the amplifier assignment function.

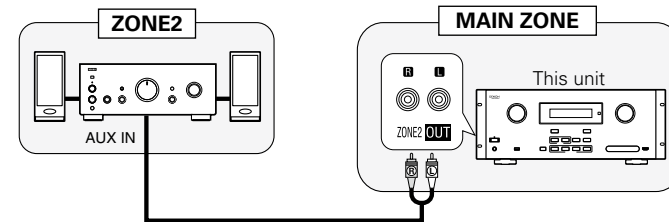
#### ❑ Connecting and setting the speakers

<p><b>"Amp Assign" setting</b> (👉 <a href="#">page 65</a>) and audio signals output</p>	<p style="text-align: center;"><b>Connecting the speakers</b></p>
<p><b>ZONE2</b> Output signal : Stereo (L / R)</p>	<p style="text-align: center;"><b>This unit</b></p>  <p style="text-align: center;"><b>Power amplifier</b></p>

### ② Zone playback by audio output

#### ❑ Audio connections (ZONE2)

The audio signals of this unit's ZONE2 audio output terminals are output to the ZONE2 amplifiers and played on this amplifiers.



- Adjust the volume on the connected amplifier.
- We recommend using high quality pin-plug cables for audio connections in order to prevent noise.
- Also be sure to read the operating instructions of the connected devices.

#### NOTE

It is not possible to play the digital audio signals input from the HDMI, COAXIAL or OPTICAL connectors in ZONE2. Play using analog connections (in stereo).

# Playback

**1** Press **ZONE SELECT** to switch the zone mode to **[Z2]** (ZONE2).

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

**3** Press **ZONE/DEVICE 1** to turn on the ZONE2 power.

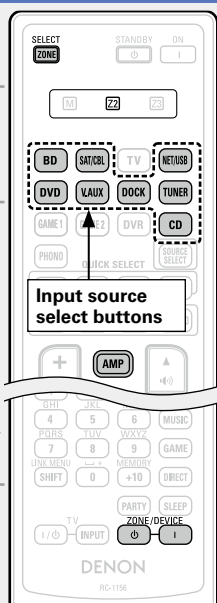
The **[Z2]** indicator on the display lights.

- Also press input source select button when in standby mode, the power turns on.
- When **ZONE/DEVICE 1** is pressed, ZONE2 turns off.
- Power in ZONE2 can be turned on or off by pressing **ZONE2 ON/OFF** on the main unit.

**4** Press the input source select button.

The audio signal of the selected source is output to ZONE2.

- To perform an operation with the main unit, press **ZONE2 SELECT** many times.



## Adjusting the volume

Use **[Mute]** **[Volume Up]** **[Volume Down]** to adjust the volume.



**[Adjustable range]** --- **-80dB -- -40dB - 18dB**

(When the "Volume Display" ([page 73](#)) setting is "Relative")

**[Adjustable range]** **0 - 41 - 99**

(When the "Volume Display" ([page 73](#)) setting is "Absolute")

- At time of purchase, "Volume Limit" ([page 73](#)) is set to "-10dB (71)".



Turn **MASTER VOLUME** after pressing **ZONE2 SELECT** on the main unit to adjust the sound volume.

## Turning off the sound temporarily

Press **[Mute]**.

The sound is reduced to the level set at "Mute Level" ([page 73](#)) in the menu.

- To cancel, either adjust the volume or press **[Mute]** again.
- The setting is canceled when the zone's power is turned off.



When power for both MAIN ZONE and ZONE2 is set to ON, power of the MAIN ZONE only can be turned off. Select **[M]** (MAIN ZONE) in step 1 then press **ZONE/DEVICE 1**.

## Quick select function

It is also possible to save four settings for ZONE2.

### □ Saving the settings

#### 1 Set the items below to the settings you want to save.

- ① Input source (page 52)
- ② Volume (page 52)

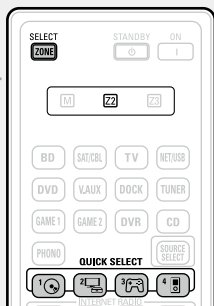
#### NOTE

The settings for each content (Media Server, iPod, etc.) cannot be memorized for the "NET/USB" source of ZONE2.

#### 2 Press ZONE SELECT to switch the zone mode to Z2 (ZONE2).

#### 3 In the zone mode for which you want to operate, press and hold the desired QUICK SELECT until "Memory" appears on the display.

The current settings will be memorized.



### □ Recalling the settings

#### 1 Press ZONE SELECT to switch the zone mode to Z2 (ZONE2).

#### 2 Press QUICK SELECT at which the settings you want to call out are saved.



### Naming quick select settings

See "Quick Sel.Name" (page 74).

#### [Quick select defaults]

	Input source	Volume
ZONE2 QUICK SELECT 1	BD	-40dB
ZONE2 QUICK SELECT 2	SAT/CBL	-40dB
ZONE2 QUICK SELECT 3	-	-
ZONE2 QUICK SELECT 4	NET/USB	-40dB

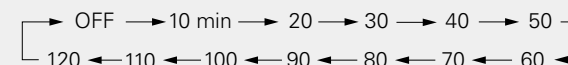
## Sleep timer function

This is useful when you want to sleep while listening in ZONE2.

#### 1 Press ZONE SELECT to switch the zone mode to Z2 (ZONE2).

#### 2 Press SLEEP and display the time you want to set.

- The time switches as shown below each time SLEEP is pressed.



- If SLEEP on the main unit is pressed, the same function as with the remote control unit can be obtained.

### To confirm the countdown time before putting the unit to sleep

Press SLEEP.

"Z2 Sleep : \*min" appears on the display.

\* Countdown time

### To cancel the sleep timer

Press SLEEP to set "OFF".



The sleep timer is also canceled when this unit is set to the standby mode or the ZONE2 power is turned off.

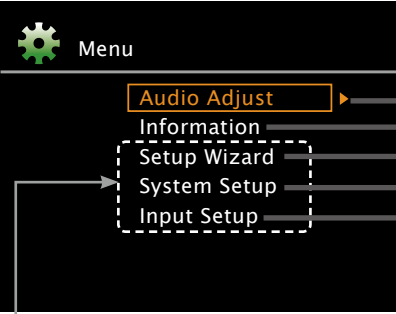
#### NOTE

The power of devices connected to this unit is not switched off by the sleep timer function. To turn off the power to connected devices, set the sleep timer functions on each of the connected devices.

# How to make detailed settings

## Menu map

For menu operation, connect a TV to this unit and display the menu on the TV screen. For menu operations, see the following page.

Setting items	Detailed items	Description	Page
	<b>Audio Adjust</b>		
	<b>Surr.Parameter</b>	Adjusts surround sound parameters.	<a href="#">60</a>
	<b>Tone</b>	Adjusts the tonal quality of the sound.	<a href="#">62</a>
	<b>Manual EQ</b>	Uses the graphic equalizer to adjust the tone of each speaker.	<a href="#">62</a>
	<b>RESTORER</b>	Expands the low and high frequency components of compressed audio to enable richer audio playback.	<a href="#">62</a>
	<b>Audio Delay</b>	Compensates for incorrect timing between video and audio.	<a href="#">62</a>
	<b>Information</b>		
	<b>Status</b>	Shows information about current settings.	<a href="#">63</a>
	<b>Audio Signal</b>	Shows information about audio input signals.	<a href="#">63</a>
	<b>HDMI Information</b>	Displays the HDMI input/output signals and HDMI monitor information.	<a href="#">63</a>
	<b>Auto Surround</b>	Displays the settings stored for the auto surround mode.	<a href="#">63</a>
	<b>Quick Select</b>	Displays the settings stored for the Quick Select function.	<a href="#">63</a>
	<b>Preset Channel</b>	Shows information about preset channels.	<a href="#">63</a>
	<b>Setup Wizard</b>	Perform the installation, connection, and setup procedures to prepare the unit for operation following guidance.	4
	<b>System Setup</b>		
	<b>Speaker Setup</b>	Sets the speaker size and distance, the channel level, etc.	<a href="#">65</a>
	<b>HDMI Setup</b>	Makes settings for HDMI video/audio output.	<a href="#">68</a>
	<b>Audio Setup</b>	Makes settings for audio playback.	<a href="#">69</a>
	<b>Network Setup</b>	Makes network settings.	<a href="#">70</a>
	<b>ZONE2 Setup</b>	Makes settings for audio playback in a ZONE2 system.	<a href="#">73</a>
	<b>Option Setup</b>	Makes various other settings.	<a href="#">73</a>
	<b>Language</b>	Sets the language for display the menu on the TV screen.	<a href="#">76</a>
		<b>Input Setup</b>	
<b>Input Assign</b>		Changes input connector assignment.	<a href="#">78</a>
<b>Video</b>		Makes the video settings.	<a href="#">79</a>
<b>Input Mode</b>		Sets the audio input mode and decode mode.	<a href="#">80</a>
<b>Rename</b>		Changes the display name for this source.	<a href="#">80</a>
<b>Source Level</b>		Adjusts the playback level of the audio input.	<a href="#">80</a>
<b>Playback Mode</b>		Makes settings for iPod, USB memory device or network source playback.	<a href="#">81</a>
<b>Still Picture</b>		Makes settings for still picture playback.	<a href="#">81</a>

**Items that only need to be set once**

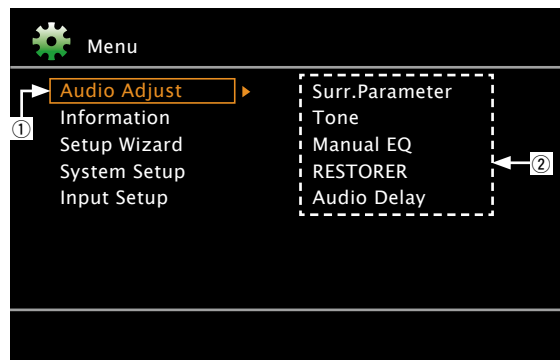
Set these for example upon purchase. Once these items are set, there is no need to set them again unless the speaker layout or the connected speakers have been changed.

Displayed items of the "Input Setup" menu differs, depending on the selected input source.

# Examples of menu screen displays

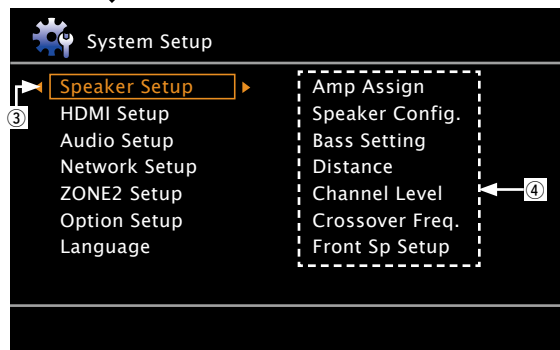
Typical examples are described below.

## [Example] Menu selection screen (Top menu)



- ① Currently selected setup item
- ② List of currently selected setup subcategory

Press  $\nabla$  to select "System Setup" and then press  $\triangleright$ .  
(Or press ENTER.)

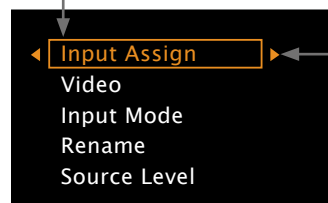


- ③ Selected setup item
- ④ Options of the selected setup item

## List

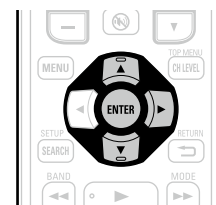
Selected item

- Switch the selected item using  $\triangle$ / $\nabla$ .



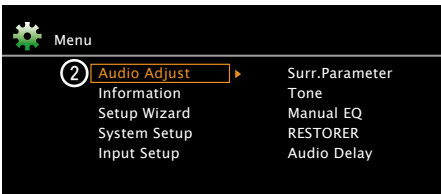
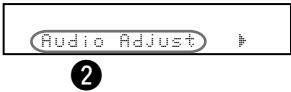
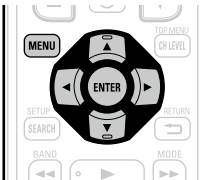
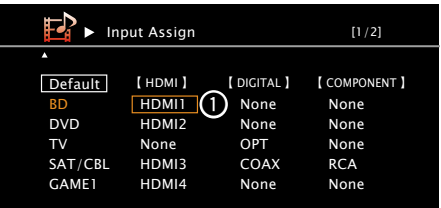
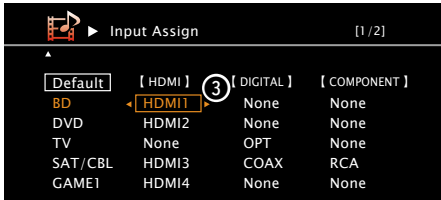


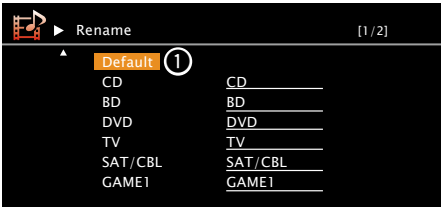
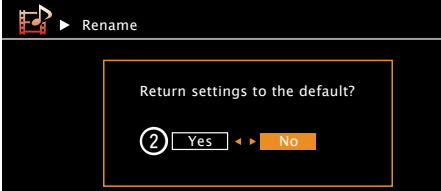
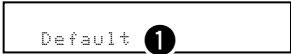
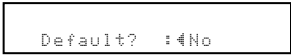
Proceed to the subcategory

(Use  $\triangleright$  or ENTER to switch.)



# Examples of menu and front display

Below we describe typical examples of displays on the TV screen and on the set's display window.

	Menu display	Front display	Description
<b>Top menu display</b>			<ol style="list-style-type: none"> <li>1 Press <b>MENU</b> to display the menu screen.</li> <li>2 TV screen: Displays the selected line. Display: Displays the selected item. <ul style="list-style-type: none"> <li>• Use <math>\Delta</math>/<math>\nabla</math> to move to the item you want to set.</li> </ul> </li> </ol> 
<b>Display when changing settings</b>	 <p>Press <b>ENTER</b>.</p> 	 <p>Press <b>ENTER</b>.</p> 	<ol style="list-style-type: none"> <li>1 TV screen: Displays the selected line. Display: Displays the selected item. <ul style="list-style-type: none"> <li>• Use <math>\Delta</math>/<math>\nabla</math> to move to the item you want to set.</li> </ul> </li> <li>2 Press <b>ENTER</b> to set to the mode in which the setting can be made.</li> <li>3 <math>\blacktriangleleft</math> <math>\blacktriangleright</math> is displayed at the sides of items whose setting can be changed. Use <math>\blacktriangleleft</math>/<math>\blacktriangleright</math> to change to the desired setting.</li> </ol>
<b>Display when resetting</b>	 <p>Press <b>ENTER</b>.</p> 	 <p>Press <b>ENTER</b>.</p> 	<ol style="list-style-type: none"> <li>1 Press <math>\Delta</math> to select "Default", then press <b>ENTER</b>.</li> <li>2 Press <math>\blacktriangleleft</math> to select "Yes", then press <b>ENTER</b>.</li> </ol>

# Inputting characters

You can change the names as desired using the "Rename" (page 80), "Zone Rename" (page 74), "Quick Sel.Name" (page 74) and character input for the network functions.

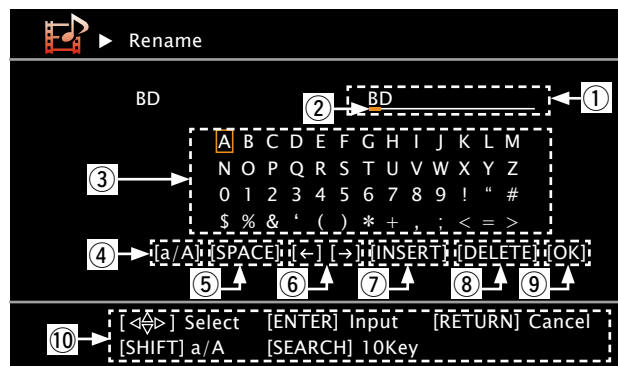
For inputting characters, there are three methods, as shown below.

## Method for inputting characters

Method	Operations
Using the keyboard screen	<ul style="list-style-type: none"> <li>Operating with the remote control unit.</li> <li>Select a character on the TV screen to input characters.</li> </ul>
Using the number buttons (10 Key input screen)	<ul style="list-style-type: none"> <li>Operating with the remote control unit.</li> <li>Multiple characters are assigned to a button, and each time the button is pressed, a character is switched.</li> </ul>
Using the cursor buttons (10 Key input screen)	<ul style="list-style-type: none"> <li>Operating with the remote control unit.</li> <li>Use <math>\Delta \nabla \triangleleft \triangleright</math> and <b>ENTER</b> to input characters.</li> </ul>

## Keyboard screen

### Display of a keyboard input screen



- ① Character input section (Maximum 8 characters. However, only the "Quick Sel.Name" can be 16 characters.)
- ② Cursor
- ③ Keyboard section
- ④ Uppercase and lowercase switch key
- ⑤ Space key
- ⑥ Cursor keys
- ⑦ Insert key
- ⑧ Delete key
- ⑨ OK key
- ⑩ Guide for operation buttons

## Using the keyboard screen

**1** Display the screen for inputting characters (page 54 "Menu map").

**2** Select a character to be changed.  
① Press  $\Delta \nabla \triangleleft \triangleright$  to select [ $\leftarrow$ ] or [ $\rightarrow$ ].

② Press **ENTER** to place the cursor at the character to be changed.

Each time **ENTER** is pressed, the cursor moves by one character.

**3** Select a character to be input with  $\Delta \nabla \triangleleft \triangleright$  then press **ENTER**.

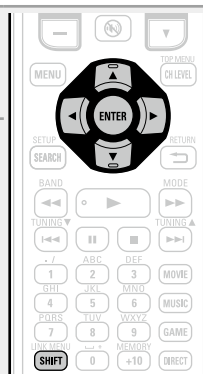
- The types of characters that can be input are as shown below.

**[Upper case characters/Numbers/Symbols]**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**0123456789**  
**! " # \$ % & ' ( ) \* + , ; < = >**  
**[Lower case characters/Numbers/Symbols]**  
**abcdefghijklmnopqrstuvwxyz**  
**0123456789**  
**. @ - \_ / : ~ ? [ \ ] ^ ` { | }**

- When you press **SHIFT** while you type in, you can change uppercase characters to lowercase and vice versa.

**4** Repeat steps 2 and 3 to change the name.

**5** Use  $\Delta \nabla \triangleleft \triangleright$  to select [**OK**], then press **ENTER**.



## Using the cursor buttons

**1** Display the screen for inputting characters  
(☞ [page 54](#) “Menu map”).

**2** Press **SEARCH** while a keyboard screen is displayed.  
A 10 Key input screen is displayed.

**3** Use ◀ ▶ to set the cursor to the character you want to change.

**4** Use ▲ ▼ to change the character, then press **ENTER**.

- The types of characters that can be input are as shown below.

**[Upper case characters]**

ABCDEFGHIJKLMNOPQRSTUVWXYZ

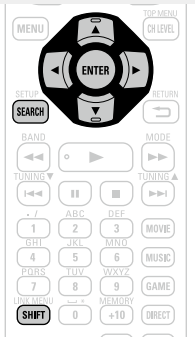
**[Lower case characters]**

abcdefghijklmnopqrstuvwxyz

**[Symbols]** ! " # \$ % & ' ( ) \* + , - . / : ; <

= > ? @ [ \ ] ^ \_ ` { | } ~

**[Numbers]** 0123456789 (Space)



- When you press **SHIFT** while you type in, you can change uppercase characters to lowercase and vice versa.

**5** Repeat steps 3 and 4 to change the name then press **ENTER** to register it.





The sound being played in the surround mode can be adjusted to your liking. The items (parameters) that can be adjusted depend on the signal being input and the currently set surround mode. For details on the adjustable parameters, see “Surround modes and surround parameters” (🔗 [page 117](#)).

### NOTE

Some setting items cannot be set while playback is stopped. Make the settings during playback.

### Menu operation

**1** Press **ZONE SELECT** to switch the zone mode to **[M]** (MAIN ZONE).  
The **[M]** indicator lights.

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

**3** Press **MENU**.  
The menu is displayed on the TV screen.

**4** Use **△▽** to select the menu to be set or operated.

**5** Press **ENTER** or **▷** to enter the setting.

- To return to the previous item, press **RETURN** ↶.
- Exiting the Menu, press **MENU** while the menu is displayed.  
The menu display disappears.



### Items that can be set with the “Audio Adjust” procedure

Surr.Parameter (🔗 [page 60](#))

Tone (🔗 [page 62](#))

Manual EQ (🔗 [page 62](#))

RESTORER (🔗 [page 62](#))

Audio Delay (🔗 [page 62](#))


## Surr.Parameter



Default settings are underlined.


Adjust surround sound parameters. It may not be possible to set this item depending on the input signal (refer to page 117 “Surround modes and surround parameters”).




### NOTE

- You cannot set the surround parameters in the PURE DIRECT mode.
- During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.

Setting items	Setting details
<b>Mode</b> Set the play modes for the different surround modes.	<input type="checkbox"/> <b>In the PLIIx or PLII mode</b> <b>Cinema</b> : Surround sound mode optimized for movie sources. <b>Music</b> : Surround sound mode optimized for music sources. <b>Game</b> : Surround sound mode optimized for games. <b>Pro Logic</b> : Dolby Pro Logic playback mode (PLII mode only).
	<input type="checkbox"/> <b>In the PLIIz mode</b> <b>Height</b> : Dolby PLIIz Height playback mode.
	<input type="checkbox"/> <b>In the DTS NEO:6 mode</b> <b>Cinema</b> : Surround sound mode optimized for movie sources. <b>Music</b> : Surround sound mode optimized for music sources.
	 <ul style="list-style-type: none"> <li>When “Surr.Parameter” – “PLIIz Height” (refer to page 61) is set to “ON”, the “Height” mode is set automatically.</li> <li>The “Music” mode is also effective for movie sources including a lot of stereo music.</li> </ul>
<b>Cinema EQ</b> Soften the treble range of movie soundtracks for better understanding.	<b>ON</b> : “Cinema EQ” is used. <b>OFF</b> : “Cinema EQ” is not used.
<b>DRC</b> Compress dynamic range (difference between loud and soft sounds).	<b>Auto</b> : Automatic dynamic range compression on/off control according to source. This can be set in the Dolby TrueHD mode. <b>Low / Middle / High</b> : These set the compression level. <b>OFF</b> : Dynamic range compression always off.
<b>D.Comp</b> Compress dynamic range (difference between loud and soft sounds).	<b>OFF</b> : Turn dynamic range compression off. <b>Low / Middle / High</b> : These set the compression level.



Setting items	Setting details
<b>LFE</b> Adjust the low-frequency effects level (LFE).	<b>-10dB – 0dB</b>  For proper playback of the different sources, we recommend setting to the values below. <ul style="list-style-type: none"> <li>Dolby Digital sources : “0dB”</li> <li>DTS movie sources : “0dB”</li> <li>DTS music sources : “-10dB”</li> </ul>
<b>C.Image</b> Assign center channel signal to front left and right channels for wider sound.	<b>0.0 – 1.0 (0.3)</b>
<b>Panorama</b> Assign front L/R signal also to surround channels for wider sound.	<b>ON</b> : Set. <b>OFF</b> : Do not set.
<b>Dimension</b> Shift sound image center to front or rear to adjust playback balance.	<b>0 – 6 (3)</b>
<b>C.Width</b> Assign center channel signal to front left and right channels for wider sound.	<b>0 – 7 (3)</b>
<b>Delay Time</b> Adjust delay time to control sound stage size.	<b>0ms – 300ms (30ms)</b>
<b>Effect Level</b> Adjust effect signal level.	<b>1 – 15 (10)</b>  Set to a lower level if the positioning and sense of phase of the surround signals seems unnatural.
<b>Room Size</b> Determine size of acoustic environment.	<b>Small</b> : Simulate acoustics of a small room. <b>Medium-S</b> : Simulate acoustics of a medium-small room. <b>Medium</b> : Simulate acoustics of a medium room. <b>Medium-L</b> : Simulate acoustics of a medium-large room. <b>Large</b> : Simulate acoustics of a large room.
	<b>NOTE</b> “Room Size” does not indicate the size of the room in which sources are played.

Setting items	Setting details
<b>Height Gain</b> Control the front height channel volume.	<p><b>Low</b> : Reduce the front height channel volume.  <b>Middle</b> : Front height channel sound is output with standard sound volume.  <b>High</b> : Increase the front height channel volume.</p> <p><b>NOTE</b></p> <p>“Height Gain” is displayed for the following settings.</p> <ul style="list-style-type: none"> <li>• When “Amp Assign” (☞ page 65) is set to “F.HEIGHT”.</li> <li>• When the “Speaker Config.” – “F.Height” setting (☞ page 66) is set other than to “None”.</li> <li>• When surround mode is “PLIIz” or the PLIIz decoder is used.</li> </ul>
<b>PLIIz Height</b> Determine whether to use front height channel.	<p><b>ON</b> : Audio is output from the front height speaker.  <b>OFF</b> : Audio is not output from the front height speaker.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• “PLIIz Height” is displayed with the settings listed below.                             <ul style="list-style-type: none"> <li>• When the “Speaker Config.” – “F.Height” setting (☞ page 66) is set to other than “None”.</li> </ul> </li> <li>• “PLIIz Height” cannot be set if the HD Audio source being played includes a front height channel. In this case, the Front height channel is played back without decoding in PLIIz mode, using the input signal.</li> </ul>
<b>AFDM (Auto flag detect mode)</b> Detect the source’s surround back channel signal and set the optimum surround mode automatically.	<p><b>ON</b> : Set.  <b>OFF</b> : Do not set.</p> <p><b>[Example] Playing Dolby Digital software (with EX flag)</b></p> <ul style="list-style-type: none"> <li>• When “AFDM” is set to “ON”, the surround mode is automatically set to the DOLBY D + PLIIx C mode.</li> <li>• To play in the DOLBY DIGITAL EX mode, set “AFDM” to “OFF” and “Surr.Parameter” – “S.Back” to “MTRX ON”.</li> </ul> <p> Some Dolby Digital EX sources do not include EX flags. If the playback mode does not switch automatically even when “AFDM” is set to “ON”, set “Surr.Parameter” – “S.Back” to “MTRX ON” or “PLIIx C”.</p>

Setting items	Setting details
<b>S.Back</b> Sets the method of generating of the surround back channel.	<p><input type="checkbox"/> <b>For 2-channel sources</b>  <b>ON</b> : The surround back channel is used.  <b>OFF</b> : No signal is played from the surround back channels.</p> <p><input type="checkbox"/> <b>For multi-channel sources</b>                      Set the decoding method for the surround back channel.  <b>ON*1</b> : Convert the 5.1-channel source of the DTS/DTS-HD input signals to the 7.1-channel output recommended by DTS and then play.  <b>MTRX ON</b> : Generate and play the surround back channel signals from the surround channel signals by means of the Dolby Digital EX decoder.  <b>ES MTRX*2</b> : Generate and play the surround back channel signals from the surround channel signals of the DTS source by means of the DTS-ES decoder.  <b>PLIIx C*3</b> : Generate and play the surround back signals by decoding the signals in the Dolby Pro Logic IIx Cinema mode.  <b>PLIIx M</b> : Generate and play the surround back signals by decoding the signals in the Dolby Pro Logic IIx Music mode.  <b>OFF</b> : Do not play the surround back channel.</p> <p>*1 This can be selected when playing the 5.1-channel source of DTS/DTS-HD.                      *2 This can be selected when playing DTS sources.                      *3 This can be selected when “Speaker Config.” – “S.Back” (☞ page 65) is set to “2spkr”.</p> <p> If the source being played contains a surround back signal, the decoder type is automatically selected by the AFDM function. Set “AFDM” to “OFF” to switch to your preferred decoder.</p> <p><b>NOTE</b></p> <p>If the setting in “Speaker Config.” – “S.Back” (☞ page 65) is “None”, “S.Back” is not displayed.</p>
<b>Subwoofer</b> Turn subwoofer output on and off.	<p><b>ON</b> : The subwoofer is used.  <b>OFF</b> : The subwoofer is not used.</p> <p><b>NOTE</b></p> <p>This can be set when the surround mode is “DIRECT” (☞ page 33) and the “Subwoofer Mode” (☞ page 66) is “LFE+Main”.</p>
<b>Default</b> The “Surr.Parameter” settings are returned to the default settings.	<p><b>Yes</b> : Reset to the defaults.  <b>No</b> : Do not reset to the defaults.</p> <p> When you select “Default” and press <b>ENTER</b>, the “Return settings to the default?” prompt is displayed. Select either “Yes” or “No”, and press <b>ENTER</b>.</p> 

## Tone


Adjust the tonal quality of the sound.

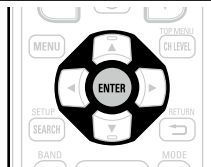
Setting items	Setting details
<b>Tone Control</b> Set the tone control function to "ON" and "OFF".	<b>ON</b> : Allow tone adjustment (bass, treble). <b>OFF</b> : Playback without tone adjustment. <div style="background-color: #e91e63; color: white; padding: 2px; border-radius: 5px; display: inline-block; margin-top: 5px;">NOTE</div> <ul style="list-style-type: none"> <li>• "Tone Control" settings are not reflected to ZONE2.</li> <li>• The tone cannot be adjusted in the "DIRECT" mode.</li> </ul>
<b>Bass</b> Adjust low frequency range (bass).	<b>-6dB – +6dB</b>  "Bass" can be set when "Tone Control" is set to "ON".
<b>Treble</b> Adjust high frequency range (treble).	<b>-6dB – +6dB</b>  "Treble" can be set when "Tone Control" is set to "ON".

## Manual EQ

Default settings are underlined.

Use the graphic equalizer to adjust the tone of each speaker.

Setting items	Setting details
<b>Adjust Channel</b> Correct the tone of each speaker.	<ol style="list-style-type: none"> <li>Select the speaker tone adjustment method.  <b>All</b> : Adjust the tone of all speakers together.  <b>L/R</b> : Adjust the tone of left and right speakers together.  <b>Each</b> : Adjust the tone of each speaker.</li> <li>Select the speaker.</li> <li>Select the adjustment frequency band.  <b>63Hz / 125Hz / 250Hz / 500Hz / 1kHz / 2kHz / 4kHz / 8kHz / 16kHz</b>                      • Select the speakers you want to adjust when "L/R" or "Each" is selected.</li> <li>Adjust the level.  <b>-20.0dB – +6.0dB (0.0dB)</b></li> </ol>
<b>Default</b> The "Manual EQ" settings are returned to the default settings.	<b>Yes</b> : Reset to the defaults. <b>No</b> : Do not reset to the defaults.  When you select "Default" and press <b>ENTER</b> , the "Return settings to the default?" prompt is displayed. Select either "Yes" or "No", and press <b>ENTER</b> .



## RESTORER

Compressed audio formats such as MP3, WMA (Windows Media Audio) and MPEG-4 AAC reduce the amount of data by eliminating signal components that are hard for the human ear to hear. The RESTORER function generates the signals eliminated upon compression, restoring the sound to conditions near those of the original sound before compression. It also corrects the sense of volume of the bass to obtain richer sound with compressed audio signals.

### Setting details

**OFF** : Do not use RESTORER.

**Mode1** (RESTORER 64) : Optimized mode for compressed sources with very weak highs.

**Mode2** (RESTORER 96) : Apply suitable bass and treble boost for all compressed sources.

**Mode3** (RESTORER HQ) : Optimized mode for compressed sources with normal highs.



• This item can be set with analog signals or PCM signal (fs = 44.1/48 kHz) is input.

• "RESTORER" settings are stored for each input source.

• This item default setting for "iPod" and "NET/USB" is "Mode3". All others are set to "OFF".

• When set to something other than "OFF", **RSTR** is displayed.

• This cannot be set when the surround mode is set to "DIRECT" or "PURE DIRECT".

## Audio Delay

Default settings are underlined.

While viewing video, manually adjust the time to delay audio output.

### Setting details

**0ms – 200ms**



• This item can be set within the range of 0 to 100 ms when "Auto Lip Sync" ([page 68](#)) is set to "ON" and when a TV compatible with Auto Lip Sync is connected.

• Store "Audio Delay" for each input source.

• Audio Delay for game mode can be set when "Video Mode" ([page 79](#)) is set to "Auto" or "Game".



Show information about receiver settings, input signals, etc.

Items	Setting details				
<b>Status</b> Show information about current settings.	<input type="checkbox"/> <b>MAIN ZONE</b> This item shows information about settings for MAIN ZONE. The information displayed differs according to the input source. <b>Select Source / Name / Surround Mode / Input Mode / Decode Mode / Assign / Video Select / Video Mode / Content Type</b> etc.				
	<input type="checkbox"/> <b>ZONE2</b> This item shows information about settings for ZONE2. <b>Power / Select Source / Volume Level</b>				
	"Volume Level" for ZONE2 is displayed when "Amp Assign" is set to "ZONE2".				
<b>Audio Signal</b> Show information about audio input signals.	<b>Surround Mode</b> : The currently set surround mode. <b>Signal</b> : The input signal type. <b>fs</b> : The input signal's sampling frequency. <b>Format</b> : The number of channels in the input signal (front, surround, LFE). <b>Offset</b> : The dialogue normalization correction value. <b>Flag</b> : This is displayed when inputting signals including a surround back channel. "MATRIX" is displayed with Dolby Digital EX and DTS-ES Matrix signals, "DISCRETE" with DTS-ES Discrete signals.				
	<table border="1"> <thead> <tr> <th>Dialogue normalization function</th> </tr> </thead> <tbody> <tr> <td>           This function is automatically activated when playing Dolby Digital sources.            It automatically corrects the standard signal level for individual program sources.            The correction value can be checked using the <b>STATUS</b> on the main unit.         </td> </tr> <tr> <td> <div style="border: 1px solid black; padding: 5px; text-align: center;">Offset - 4dB</div> </td> </tr> <tr> <td>           The figure is the corrected value.            This cannot be changed.         </td> </tr> </tbody> </table>	Dialogue normalization function	This function is automatically activated when playing Dolby Digital sources. It automatically corrects the standard signal level for individual program sources. The correction value can be checked using the <b>STATUS</b> on the main unit.	<div style="border: 1px solid black; padding: 5px; text-align: center;">Offset - 4dB</div>	The figure is the corrected value. This cannot be changed.
Dialogue normalization function					
This function is automatically activated when playing Dolby Digital sources. It automatically corrects the standard signal level for individual program sources. The correction value can be checked using the <b>STATUS</b> on the main unit.					
<div style="border: 1px solid black; padding: 5px; text-align: center;">Offset - 4dB</div>					
The figure is the corrected value. This cannot be changed.					
<b>HDMI Information</b> Show information about HDMI input/output signals and monitor.	<b>Signal Info.</b> • <b>Resolution / Color Space / Pixel Depth</b> <b>Monitor Info.</b> • <b>Interface / Support Resl.</b>				

Items	Setting details
<b>Auto Surround</b> Show information about auto surround mode settings.	<b>Analog/PCM 2ch / Digital 2ch / Digital 5.1ch / Multi ch</b>
<b>Quick Select</b> Show information about "Quick select function" ( <a href="#">page 49</a> ) settings.	<b>Quick Select 1 / Quick Select 2 / Quick Select 3 / Quick Select 4 / ZONE2 Quick Select 1 / ZONE2 Quick Select 2 / ZONE2 Quick Select 3 / ZONE2 Quick Select 4</b> • <b>Name / Volume Level / Select Source / Video Select / Auto Surround Mode Analog/PCM 2ch / Auto Surround Mode Digital 2ch / Auto Surround Mode Digital 5.1ch / Auto Surround Mode Multi ch</b>
	"Volume Level" for ZONE2 is displayed when "Amp Assign" is set to "ZONE2".
<b>Preset Channel</b> Shows information about preset channels.	<b>A1 – G8</b> "A1 – G8" is displayed when the input source is "NET/USB".
	<div style="border: 1px solid black; padding: 2px; display: inline-block;"><b>NET/USB</b></div>



When changing the audio, video, display or other settings.

- Can be used without changing the settings. Please set if necessary.

## Menu operation

**1** Press **ZONE SELECT** to switch the zone mode to **[M]** (MAIN ZONE).

The **[M]** indicator lights.

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

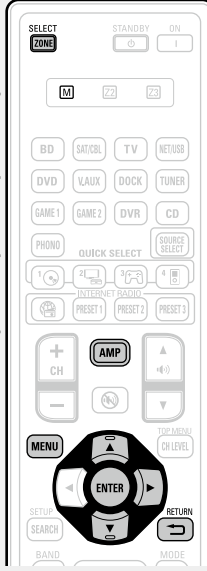
**3** Press **MENU**.

The menu is displayed on the TV screen.

**4** Press **△▽** to select the menu to be set or operated.

**5** Press **ENTER** or **▷** to enter the setting.

- To return to the previous item, press **RETURN** ↶.
- Exiting the Menu, press **MENU** while the menu is displayed. The menu display disappears.



## Items that can be set with the “System Setup” procedure

**Speaker Setup** (👉 page 65)

**HDMI Setup** (👉 page 68)

**Audio Setup** (👉 page 69)

**Network Setup** (👉 page 70)

**ZONE2 Setup** (👉 page 73)

**Option Setup** (👉 page 73)

**Language** (👉 page 76)



## Speaker Setup


Default settings are underlined.


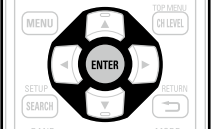

Perform when setting the speakers.

- “System Setup” can be used without changing the settings. Please set if necessary.



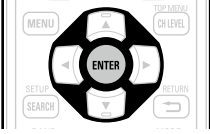
Setting items	Setting details
<b>Amp Assign</b> The signal output from the surround back terminals of this unit can be switched to match your speaker environment.	<b>NORMAL</b> : Select the “NORMAL” setting to perform 7.1-channel playback using the surround back. <b>ZONE2</b> : Select the “ZONE2” setting to assign the surround back terminals for ZONE2 and output the audio in stereo. <b>Bi-AMP</b> : Select the “Bi-AMP” setting to connect the front speakers via the bi-amp connection. <b>Front B</b> : Select the “Front B” setting to use the second set of front speakers for playback. You can switch the front speakers A and B to be used for playback in accordance with the 2-channel playback or multi-channel playback mode. When you select this Front B setting, also perform the “Front Sp Setup” ( <a href="#">page 67</a> ) procedure. <b>F.HEIGHT</b> : Select the “F.HEIGHT” setting to use the front height speaker for playback.
<b>Speaker Config.</b> Select speaker configuration and size (bass reproduction capability).  <b>NOTE</b> Do not use the outward shape of the speaker to determine selection of a “Large” or “Small” speaker. Instead, use the frequencies set in “Crossover Freq.” ( <a href="#">page 67</a> ) as the standard for determining bass reproduction capability.	<b>Front</b> : Set the front speaker size. <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> </ul> <ul style="list-style-type: none"> <li>• When “Subwoofer” is set to “No”, “Front” is automatically set to “Large”.</li> <li>• When “Front” is set to “Small”, “Center”, “Surround”, “S.Back” and “F.Height” can not be set to “Large”.</li> </ul> <hr/> <b>Center</b> : Set the presence and size of the center speaker. <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> <li>• <b>None</b> : Select when a center speaker is not connected.</li> </ul> “Large” is not displayed when “Front” is set to “Small”.


Setting items	Setting details
<b>Speaker Config.</b> (Continued)	<b>Subwoofer</b> : Set the presence of a subwoofer. <ul style="list-style-type: none"> <li>• <b>Yes</b> : Use a subwoofer.</li> <li>• <b>No</b> : Select when a subwoofer is not connected.</li> </ul> When “Front” is set to “Small”, “Subwoofer” is automatically set to “Yes”.
	<b>Surround</b> : Set the presence and size of the surround speakers. <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> <li>• <b>None</b> : Select when the surround speakers are not connected.</li> </ul> <ul style="list-style-type: none"> <li>• When “Surround” is set to “Large”, “S.Back” and “F.Height” can be set to “Large”.</li> <li>• When “Surround” is set to “None”, “S.Back” and “F.Height” are automatically set to “None”.</li> </ul>
	<b>S.Back</b> : Set the presence, size and number of surround back speakers. <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> <li>• <b>None</b> : Select when the surround back speakers are not connected.</li> </ul> <ul style="list-style-type: none"> <li>• <b>2spkrs</b> : Use two surround back speakers.</li> <li>• <b>1spkr</b> : Use only one surround back speaker. When you select this setting, connect the surround back speaker to the left (L) channel.</li> </ul> Even when the “S.Back” setting is other than “None”, sound may not be emitted from the surround back speaker, depending on the playback source. In this case, make “Surr.Parameter” – “S.Back” setting other than “OFF” ( <a href="#">page 61</a> ).  <b>NOTE</b> When “Amp Assign” setting ( <a href="#">page 65</a> ) is “NORMAL”, you can make the “S.Back” setting.

Setting items	Setting details
<b>Speaker Config.</b> (Continued)	<p><b>F.Height</b> : Set the presence and size of the front height speakers.</p> <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> <li>• <b>None</b> : Select when the front height speakers are not connected.</li> </ul> <p><b>NOTE</b></p> <p>When “Amp Assign” setting (🔗 page 65) is “F.HEIGHT”, you can make the “F.Height” setting.</p>
<b>Bass Setting</b> Set subwoofer and LFE signal range playback.	<p><b>Subwoofer Mode</b> : Select low range signals to be reproduced by subwoofer.</p> <ul style="list-style-type: none"> <li>• <b>LFE</b> : The low range signal of the channel set to “Small” speaker size is added to the LFE signal output from the subwoofer.</li> <li>• <b>LFE+Main</b> : The low range signal of all channels is added to the LFE signal output from the subwoofer.</li> </ul> <p></p> <ul style="list-style-type: none"> <li>• “Subwoofer Mode” can be set when “Speaker Config.” – “Subwoofer” (🔗 page 65) is set to “Yes”.</li> <li>• Play music or a movie source and select the mode offering the strongest bass.</li> <li>• Select “LFE+Main” if you want the bass signals to always be produced from the subwoofer.</li> </ul> <p><b>NOTE</b></p> <p>If “Front” and “Center” for “Speaker Config.” are set to “Large”, and “Subwoofer Mode” is set to “LFE”, no sound may be output from the subwoofers, depending on the input signal or selected surround mode.</p> <p><b>LPF for LFE</b> : Set LFE signal playback range. Set this when you want to change the playback frequency of the subwoofer.</p> <p>• <b>80Hz / 90Hz / 100Hz / 110Hz / 120Hz / 150Hz / 200Hz / 250Hz</b></p>

Setting items	Setting details
<b>Distance</b> Set distance from listening position to speakers. Measure beforehand the distance from the listening position to each speaker.	<p><b>Unit</b> : Set the unit of distance.</p> <ul style="list-style-type: none"> <li>• <b>Meters / Feet</b></li> </ul> <p><b>Step</b> : Set the minimum variable width of the distance.</p> <ul style="list-style-type: none"> <li>• <b>0.1m / 0.01m</b></li> <li>• <b>1ft / 0.1ft</b></li> </ul> <p><b>Default</b> : The “Distance” settings are returned to the default settings.</p> <ul style="list-style-type: none"> <li>• <b>Yes</b> : Reset to the defaults.</li> <li>• <b>No</b> : Do not reset to the defaults.</li> </ul> <p> When you select “Default” and press <b>ENTER</b>, the “Return settings to the default?” prompt is displayed. Select either “Yes” or “No”, and press <b>ENTER</b>.</p>  <p><b>Front L / Front R / Center / Subwoofer / Surround L / Surround R / S.Back L* / S.Back R* / F.Height L / F.Height R</b> : Select the speaker.</p> <p>* When the “Speaker Config.” – “S.Back” setting (🔗 page 65) is set to “1spkr”, “S.Back” is displayed.</p> <ul style="list-style-type: none"> <li>• <b>0.00m – 18.00m / 0.0ft – 60.0ft</b> : Set the distance.</li> </ul> <p></p> <ul style="list-style-type: none"> <li>• The speakers that can be selected differ depending on the “Amp Assign” (🔗 page 65) and “Speaker Config.” (🔗 page 65) settings.</li> <li>• Default settings :                      Front L / Front R / Center / Subwoofer / F.Height L / F.Height R : 3.60 m (12.0 ft)                      Surround L / Surround R / S.Back L / S.Back R : 3.00 m (10.0 ft)</li> <li>• Set the difference in the distance between the speakers to less than 6.00 m (20.0 ft).</li> </ul> <p><b>NOTE</b></p> <p>Speakers set to “None” in “Speaker Config.” (🔗 page 65) are not displayed.</p>





Setting items	Setting details
<b>Channel Level</b> Set the volume of the test tone to be the same when it is output from each speaker.	<p><b>Test Tone Start</b> : Output test tone.</p> <ul style="list-style-type: none"> <li>• <b>Front L / F.Height L / Center / F.Height R / Front R / Surround R / S.Back R* / S.Back L* / Surround L / Subwoofer</b> : Select the speaker.</li> <li>* When the "Speaker Config." – "S.Back" setting (<a href="#">page 65</a>) is set to "1spkr", "S.Back" is displayed.</li> </ul> <ul style="list-style-type: none"> <li>• <b>-12.0dB – +12.0dB (0.0dB)</b> : Adjust the volume.</li> </ul> <p></p> <p>When "Channel Level" is adjusted, the adjusted values are set for all the surround modes. To adjust the channel level separately for the different surround modes, use the operation see <a href="#">page 48</a>.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Speakers set to "None" in the "Speaker Config." (<a href="#">page 65</a>) settings are not displayed.</li> <li>• When a headphones jack is inserted in the PHONES jack of this unit, the "Channel Level" is not displayed.</li> </ul> <p><b>Default</b> : The "Channel Level" settings are returned to the default settings.</p> <ul style="list-style-type: none"> <li>• <b>Yes</b> : Reset to the defaults.</li> <li>• <b>No</b> : Do not reset to the defaults.</li> </ul> <p> When you select "Default" and press <b>ENTER</b>, the "Return settings to the default?" prompt is displayed. Select either "Yes" or "No", and press <b>ENTER</b>.</p> 



Setting items	Setting details
<b>Crossover Freq.</b> Set the maximum frequency of the bass signal output from each channel to the subwoofer. Set the Crossover Frequency to suit the bass reproduction capability of the speaker being used.	<p><b>Crossover</b> : Set the crossover frequency.</p> <ul style="list-style-type: none"> <li>• <b>40Hz / 60Hz / 80Hz / 90Hz / 100Hz / 110Hz / 120Hz / 150Hz / 200Hz / 250Hz</b></li> </ul> <p><b>Advanced</b> : Specify crossover frequency for each speaker.</p> <ul style="list-style-type: none"> <li>• <b>Front / Center / Surround / S.Back / F.Height</b> : Select the speaker.</li> <li>• <b>40Hz / 60Hz / 80Hz / 90Hz / 100Hz / 110Hz / 120Hz / 150Hz / 200Hz / 250Hz</b> : Set the crossover frequency.</li> </ul> <p></p> <ul style="list-style-type: none"> <li>• "Crossover Freq." can be set when the "Bass Setting" – "Subwoofer Mode" (<a href="#">page 66</a>) setting is "LFE+Main", or when you have a speaker that is set to "Small".</li> <li>• Always set the crossover frequency to "80Hz". When using small speakers, however, we recommend setting the crossover frequency to a higher frequency.</li> <li>• For speakers set to "Small", sound below the crossover frequency is cut from the sound output. The cut bass sound is output from the subwoofer or front speakers.</li> <li>• The speakers that can be set when "Advanced" is selected differ depending on to the "Subwoofer Mode" setting (<a href="#">page 66</a>).</li> <li>• When "LFE" is selected, speakers set to "Small" at "Speaker Config." can be set. If the speakers are set to "Large", "Full Band" is displayed and the setting cannot be made.</li> <li>• If set to "LFE+Main", this setting can be made regardless of the speaker size.</li> </ul>
<b>Front Sp Setup</b> Set the front speakers to use for every surround mode.	<p><b>2CH DIRECT/STEREO</b> : The front speakers used in the direct, stereo and pure direct play modes (2 channel) are set in advance.</p> <ul style="list-style-type: none"> <li>• <b>A</b> : Front speaker A is used.</li> <li>• <b>B</b> : Front speaker B is used.</li> <li>• <b>A+B</b> : Both front speakers A and B are used.</li> </ul> <p><b>NOTE</b></p> <p>This can be set when "Amp Assign" is set to "Front B" (<a href="#">page 65</a>).</p> <p><b>MULTI CH</b> : The front speakers used in modes other than the direct, stereo and pure direct play modes (2 channel) are set in advance.</p> <ul style="list-style-type: none"> <li>• <b>A</b> : Front speaker A is used.</li> <li>• <b>B</b> : Front speaker B is used.</li> <li>• <b>A+B</b> : Both front speakers A and B are used.</li> </ul>

## HDMI Setup

Default settings are underlined.

Make settings for HDMI video/audio output.

Setting items	Setting details
<b>Auto Lip Sync</b> Make automatic compensation for timing shift in audio and video output.	<b>ON</b> : Compensated. <b>OFF</b> : Not compensated.
<b>HDMI Audio Out</b> Select HDMI audio output device.	<b>AMP</b> : Play back through output terminals on the unit. <b>TV</b> : Play back through TV connected to the unit.  <ul style="list-style-type: none"> <li>The audio signal input from the HDMI input connector can be output as an output signal from the HDMI output connector by setting the HDMI audio output destination to TV. Audio signals input via the Analog/Coaxial/Optical input connectors cannot be output from the HDMI output connector.</li> <li>When the HDMI control function is activated, priority is given to the TV audio setting (<a href="#">page 46</a> "HDMI control function").</li> </ul>
<b>HDMI Control</b> You can link operations with devices connected to HDMI and compatible with HDMI Control.	<b>ON</b> : Use HDMI control function. <b>OFF</b> : Do not use HDMI control function.  <ul style="list-style-type: none"> <li>When a device that is not compatible with the HDMI control function is connected, set "HDMI Control" to "OFF".</li> <li>Please consult the operating instructions for each connected device to check the settings.</li> <li>Refer to "HDMI control function" (<a href="#">page 46</a>) for more information about the HDMI control function.</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li><b>When "HDMI Control" is set to "ON", it consumes more standby power.</b> If you are not using this unit for an extended period, it is recommended that you unplug the power cord from the power outlet.</li> <li>The HDMI control function controls operations of a TV that is compatible with the HDMI control function. Make sure that the TV and HDMI are connected when you perform HDMI control.</li> <li>If the "HDMI Control" settings have been changed, always reset the power to connected devices after the change.</li> </ul>

Setting items	Setting details
<b>Standby Source</b> Sets the HDMI input source to put into standby when the power is on.	<b>Last</b> : Enters standby with the previously used input source. <b>HDMI1 / HDMI2 / HDMI3 / HDMI4 / HDMI5 / HDMI6</b> : Enters standby with each of the input sources assigned to each input terminal.  "Standby Source" can be set when "HDMI Control" is set to "ON".
<b>P.Off Control</b> Links the power standby of this unit to external devices.	<b>All</b> : If power to a connected TV is turned off independently of the input source, power to this unit is automatically set to standby. <b>Video</b> : If power to a connected TV is turned off when the input source is BD / DVD / TV / SAT/CBL / GAME1 / GAME2 / V.AUX / DOCK, power to this unit is automatically set to standby. <b>OFF</b> : This unit does not link with power to a TV.  "P.Off Control" can be set when "HDMI Control" is set to "ON".



## Audio Setup

Default settings are underlined.

Make settings for audio playback.

Setting items	Setting details
<b>2ch Direct/Stereo</b> Select the method for setting the speakers used in the 2-channel direct and stereo playback modes.	<p><b>Setting</b> : Select the method for setting the speakers used in the 2-channel direct and stereo playback modes.</p> <ul style="list-style-type: none"> <li>• <b>Basic</b> : The settings at "Speaker Setup" (<a href="#">page 65</a>) are applied.</li> <li>• <b>Custom</b> : Make separate settings for 2-channel. Make the following settings:</li> </ul> <hr/> <p><b>Front</b> : Set the front speaker size.</p> <ul style="list-style-type: none"> <li>• <b>Large</b> : Use a large speaker that can adequately play back low frequencies.</li> <li>• <b>Small</b> : Use a small speaker that has inadequate playback capacity for low frequencies.</li> </ul> <p> If "Speaker Config." – "Subwoofer" (<a href="#">page 65</a>) is set to "No", the setting is automatically set to "Large".</p> <hr/> <p><b>SW</b> : Set the presence of a subwoofer.</p> <ul style="list-style-type: none"> <li>• <b>Yes</b> : Use a subwoofer.</li> <li>• <b>No</b> : Select when a subwoofer is not connected.</li> </ul> <p> If "Speaker Config." – "Subwoofer" (<a href="#">page 65</a>) is set to "No", the setting is automatically set to "No". If the "Front" setting is "Small", the setting is automatically "Yes".</p> <hr/> <p><b>SW Mode</b> : Select low range signals to be reproduced by subwoofer.</p> <ul style="list-style-type: none"> <li>• <b>LFE</b> : When the "2ch Direct/Stereo" – "Front" setting is set to "Large", the LFE signal alone is output from the subwoofer. Also, when the "2ch Direct/Stereo" – "Front" setting is set to "Small", the front channel low range signal is added to the LFE signal output from the subwoofer.</li> <li>• <b>LFE+Main</b> : The front channel low range signal is added to the LFE signal output from the subwoofer.</li> </ul> <p> This setting can be set made "2ch Direct/Stereo" – "SW" is set to "Yes".</p> <hr/> <p><b>Crossover</b> : Set the maximum frequency of the bass signal output from each channel to the subwoofer.</p> <p>• <b>40Hz / 60Hz / <u>80Hz</u> / 90Hz / 100Hz / 110Hz / 120Hz / 150Hz / 200Hz / 250Hz</b></p> <p></p> <ul style="list-style-type: none"> <li>• This setting can be set made "2ch Direct/Stereo" – "SW" is set to "Yes".</li> <li>• If the "2ch Direct/Stereo" – "Front" setting is "Large" and the "SW Mode" setting is "LFE", "Full Band" is displayed and the setting cannot be made.</li> </ul>

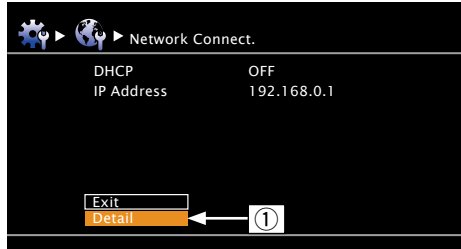
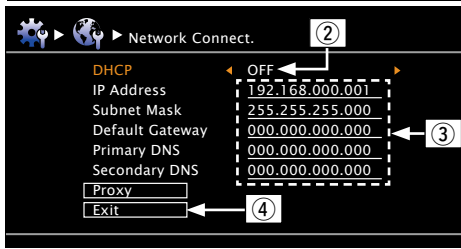
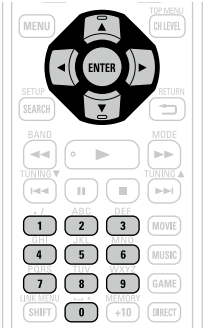
Setting items	Setting details
<b>2ch Direct/Stereo</b> (Continued)	<p><b>Distance FL / Distance FR</b> : Select the speaker.</p> <ul style="list-style-type: none"> <li>• <b><u>0.0ft</u> – 60.0ft (12.0ft) / <u>0.00m</u> – 18.00m (3.6m)</b> : Set the distance to the speaker.</li> </ul> <p> Set the difference in the distance between the speakers to less than 20.0 ft (6.00 m).</p> <hr/> <p><b>Level FL / Level FR</b> : Select the speaker.</p> <ul style="list-style-type: none"> <li>• <b>-12.0dB – +12.0dB (<u>0.0dB</u>)</b> : Adjust the level of each channel.</li> </ul>
<b>Auto Surround</b> Make setting for memorizing surround mode setting for each input signal type.	<p><b>ON</b> : Memorize settings. Automatically play with the last used surround mode.</p> <p><b>OFF</b> : Do not memorize settings. Surround mode does not change according to input signal.</p> <p></p> <ul style="list-style-type: none"> <li>• The auto surround mode function lets you store in the memory the surround mode last used for playing the four types of input signals listed below.               <ol style="list-style-type: none"> <li>① Analog and PCM 2-channel signals</li> <li>② Dolby Digital and DTS 2-channel signals</li> <li>③ Dolby Digital and DTS multi-channel signals</li> <li>④ LPCM Multi-channel signals</li> </ol> </li> <li>• When playing in PURE DIRECT, the surround mode does not change even if the input signal is changed.</li> </ul>





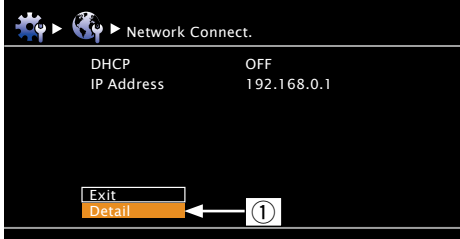
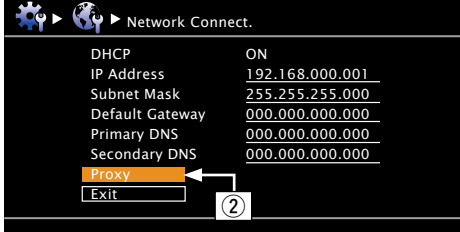
## Network Setup


Default settings are underlined.

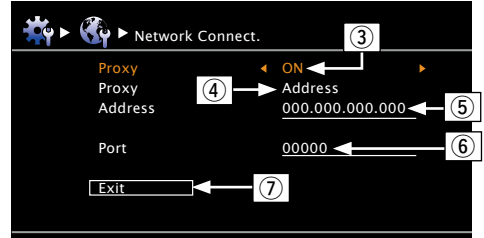
Make network settings.




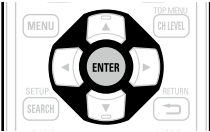
Setting items	Setting details
<b>Network Connect.</b> Make settings for wired LAN.	Only set "Network Connect." when connecting to a network without a DHCP function.      
	<p>① On the menu, select "Network Connect." – "Detail" and press <b>ENTER</b>.</p> <p>② Use <math>\Delta \nabla \triangleleft \triangleright</math> to set "DHCP" to "OFF", then press <b>ENTER</b>. The DHCP function is disabled.</p>






Setting items	Setting details
<b>Network Connect.</b> (Continued)	<p>③ Use <math>\Delta \nabla \triangleleft \triangleright</math> or <b>0–9</b> to input the address and press <b>ENTER</b>.</p> <ul style="list-style-type: none"> <li>• <b>IP Address</b> : Set the IP address within the ranges shown below. The Network Audio function cannot be used if other IP addresses are set. CLASS A: 10.0.0.1 – 10.255.255.254 CLASS B: 172.16.0.1 – 172.31.255.254 CLASS C: 192.168.0.1 – 192.168.255.254</li> <li>• <b>Subnet Mask</b> : When connecting an xDSL modem or terminal adapter directly to this unit, input the subnet mask indicated in the documentation supplied by your provider. Normally input 255.255.255.0.</li> <li>• <b>Default Gateway</b> : When connected to a gateway (router), input its IP address.</li> <li>• <b>Primary DNS, Secondary DNS</b> : If there is only one DNS address indicated in the documentation supplied by your provider, input it at "Primary DNS". If there are two or more DNS addresses, input the first one at "Secondary DNS".</li> </ul> <p>④ Use <math>\nabla</math> to select "Exit" and press <b>ENTER</b>. Setup is complete.</p> <ul style="list-style-type: none"> <li>• When connecting to the network via a Proxy server, select "Proxy" and press <b>ENTER</b> (see <a href="#">page 71</a> "Proxy settings").</li> </ul> <p> If you are using a broadband router (DHCP function), there is no need to make the settings at "IP Address" and "Proxy", since the DHCP function is set to "ON" in this unit's default settings.</p> <ul style="list-style-type: none"> <li>• If this unit is being used connected to a network without the DHCP function, the network settings must be made. In this case, some knowledge of networks is required. For details, consult a network administrator.</li> <li>• If you cannot connect to the Internet, recheck the connections and settings (see <a href="#">page 15</a>).</li> <li>• If you do not understand about Internet connection, contact your ISP (Internet Service Provider) or the store from which you purchased your computer.</li> <li>• When you want to cancel the setting during IP address input, press <b>RETURN</b> .</li> </ul>

Setting items	Setting details
<b>Network Connect.</b> (Continued)	<p><b>Proxy settings</b> : Make this setting when connecting to the Internet via a proxy server.</p>  
	<p>① On the menu, select "Network Connect." – "Detail" and press <b>ENTER</b>.</p> <p>② Use <math>\Delta \nabla</math> to set "Proxy" and press <b>ENTER</b>.</p>



Setting items	Setting details
<b>Network Connect.</b> (Continued)	
	<p>③ Use <math>\triangleleft \triangleright</math> to set "Proxy" to "ON" and press <math>\nabla</math>. The proxy server is enabled.</p> <p>④ Use <math>\triangleleft \triangleright</math> to select the proxy server input method, and then press <math>\nabla</math>. <b>Address</b> : Select when inputting by address. <b>Name</b> : Select when inputting by domain name.</p> <p>⑤ Use <math>\Delta \nabla \triangleleft \triangleright</math> or <b>0-9</b> to input the proxy server address or domain name and press <b>ENTER</b>. When "Address" is selected in step ④ : Input the address When "Name" is selected in step ④ : Input the domain name • For character input, see <a href="#">page 57</a>.</p> <p>⑥ Use <math>\Delta \nabla \triangleleft \triangleright</math> or <b>0-9</b> to input the proxy server port number and press <b>ENTER</b>.</p> <p>⑦ Use <math>\nabla</math> to select "Exit" and press <b>ENTER</b>. Setup is complete.</p>

Setting items	Setting details
<b>Other</b> Network function on/off setting during standby, and PC language setting.	<p><b>Network Standby</b> : Set the network function on/off during standby.</p> <ul style="list-style-type: none"> <li>• <b>ON</b> : Network is on during standby. Main unit operable with a network compatible controller.</li> <li>• <b>OFF</b> : Suspend network function during standby.</li> </ul> <p> Set to "ON" when using the web control function.</p> <p><b>NOTE</b></p> <p><b>When "Other" – "Network Standby" is set to "ON", it consumes more standby power.</b></p> <p><b>Character</b> : When characters are not displayed correctly, set the MP3 ID3-Tag character code type reproduced by the USB memory device.</p> <ul style="list-style-type: none"> <li>• <b>Auto</b> : Auto-select character code.</li> <li>• <b>Latin</b> : Select ISO 8859-1 Latin-1.</li> <li>• <b>Japanese</b> : Select Shift-JIS.</li> </ul> <p> If the characters are not properly displayed when set to "Auto", set to "Latin" or "Japanese".</p> <p><b>PC Language</b> : Select computer environment language.</p> <ul style="list-style-type: none"> <li>• <b>Arabic / Chinese(simplified) / Chinese(traditional) / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Korean / Norwegian / Polish / Portuguese / Portuguese(Brazil) / Russian / Spanish / Swedish / Turkish</b></li> </ul> <p><b>Friendly Name</b> : The Friendly Name is the name of this unit displayed on the network. Up to 63 characters can be input. The default Friendly Name on first use is "DENON:[DN-500AV]".</p> <ul style="list-style-type: none"> <li>• For character input, see <a href="#">page 57</a>.</li> </ul> <p><b>Default</b> : Restores Friendly Name, which you had changed, to the default setting.</p> <ul style="list-style-type: none"> <li>• <b>Yes</b> : Reset to the defaults.</li> <li>• <b>No</b> : Do not reset to the defaults.</li> </ul> <p> When you select "Default" and press <b>ENTER</b>, the "Return settings to the default?" prompt is displayed. Select either "Yes" or "No", and press <b>ENTER</b>.</p> 



Setting items	Setting details
<b>Other</b> (Continued)	<p><b>Notification</b> : Sets the display of a notification message when the latest firmware is released.</p> <p><b>Update</b> : Displays a notification message on this unit's menu screen when the latest firmware is released with "Firmware Update". The notification message is displayed for about 20 seconds when the power is turned on. Connect to broadband Internet (<a href="#">page 15</a>) when using this function.</p> <ul style="list-style-type: none"> <li>• <b>ON</b> : Display update message.</li> <li>• <b>OFF</b> : Do not display update message.</li> </ul> <p> When you press <b>ENTER</b> during display of the notification message, the "Check for Update" screen is displayed (Refer to <a href="#">page 75</a> for more information on "Firmware Update").</p> <ul style="list-style-type: none"> <li>• Press <b>RETURN</b>  to erase the notification message.</li> </ul> <p><b>Upgrade</b> : Display a notification message on this unit's menu screen when downloadable firmware is released with "Add New Feature". The notification message is displayed for about 20 seconds when the power is turned on. Connect to broadband Internet (<a href="#">page 15</a>) when using this function.</p> <ul style="list-style-type: none"> <li>• <b>ON</b> : Display upgrade message.</li> <li>• <b>OFF</b> : Do not display upgrade message.</li> </ul> <p> When you press <b>ENTER</b> during display of the notification message, the "Add New Feature" screen is displayed (Refer to <a href="#">page 75</a> for more information on "Add New Feature").</p> <ul style="list-style-type: none"> <li>• Press <b>RETURN</b>  to erase the notification message.</li> </ul> 
<b>Network Info.</b> Display network information.	<b>Friendly Name / DHCP=ON or OFF / IP Address / MAC Address</b>

## ZONE2 Setup

Default settings are underlined.

Set the audio to play back with multi-zone (ZONE2).

“ZONE2 Setup” is displayed when “ZONE2” is selected with “Amp Assign” (page 65).



Setting items	Setting details
<b>Lch Level</b> Adjust the left channel output level.	<u>-12dB – +12dB (0dB)</u>
<b>Rch Level</b> Adjust the right channel output level.	<u>-12dB – +12dB (0dB)</u>
<b>Volume Limit</b> Make a setting for maximum volume.	<b>OFF</b> : Do not set a maximum volume. <u>-20dB (61) / -10dB (71) / 0dB (81)</u>  This is displayed from 0 to 99 when “Volume Display” (page 73) is set to “Absolute”.
<b>Power On Level</b> Define the volume setting that is active when the power is turned on.	<b>Last</b> : Use the memorized setting from the last session. <b>--- (0)</b> : Always mute when power is turned on. <b>-80dB – 18dB (1 – 99)</b> : The volume is adjusted to the set level.  This is displayed from 0 to 99 when “Volume Display” (page 73) is set to “Absolute”.
<b>Mute Level</b> Set the amount of attenuation when muting is on.	<b>Full</b> : The sound is muted entirely. <b>-40dB</b> : The sound is attenuated by 40 dB down. <b>-20dB</b> : The sound is attenuated by 20 dB down.

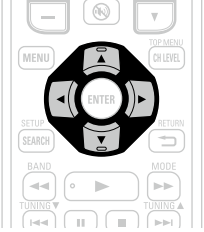





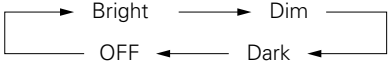

## Option Setup

Default settings are underlined.


Make various other settings.

Setting items	Setting details
<b>Volume Control</b> Set the MAIN ZONE (room where the unit is located) volume setting.	<b>Volume Display</b> : Set how volume is displayed. <ul style="list-style-type: none"> <li>• <b>Relative</b> : Display -dB (Min), in the range -80.5 dB to 18 dB.</li> <li>• <b>Absolute</b> : Display in the range 0 (Min) to 99.</li> </ul>  <ul style="list-style-type: none"> <li>• The “Volume Display” setting is applied also to the “Volume Limit” and “Power On Level” display method.</li> <li>• The “Volume Display” setting applies to all zones.</li> </ul>
	<b>Volume Limit</b> : Make a setting for maximum volume. <ul style="list-style-type: none"> <li>• <b>OFF</b> : Do not set a maximum volume.</li> <li>• <u>-20dB (61) / -10dB (71) / 0dB (81)</u></li> </ul>
	<b>Power On Level</b> : Define the volume setting that is active when the power is turned on. <ul style="list-style-type: none"> <li>• <b>Last</b> : Use the memorized setting from the last session.</li> <li>• <b>--- (0)</b> : Always use the muting on condition when power is turned on.</li> <li>• <b>-80dB – 18dB (1 – 99)</b> : The volume is adjusted to the set level.</li> </ul>
	<b>Mute Level</b> : Set the amount of attenuation when muting is on. <ul style="list-style-type: none"> <li>• <b>Full</b> : The sound is muted entirely.</li> <li>• <b>-40dB</b> : The sound is attenuated by 40 dB down.</li> <li>• <b>-20dB</b> : The sound is attenuated by 20 dB down.</li> </ul>
<b>Source Delete</b> Remove from the display input sources that are not used.	<b>BD / DVD / TV / SAT/CBL / GAME1 / GAME2 / V.AUX / DOCK / NET/USB / CD</b> : Select input source that is not used. <ul style="list-style-type: none"> <li>• <b>ON</b> : Use this source.</li> <li>• <b>Delete</b> : Do not use this source.</li> </ul>
	<div style="border: 1px solid black; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Input sources being used in the various zones cannot be deleted.</li> <li>• Input sources set to “Delete” cannot be selected using the input source select button.</li> </ul> </div> 

Setting items	Setting details
<b>GUI</b> Make the settings related to displays on the TV screen.	<p><b>Screensaver</b> : Make screensaver settings.</p> <ul style="list-style-type: none"> <li>• <b>ON</b> : The screensaver is activated during menu display, NET/USB or iPod screen display if no operation is performed for an approximately 5-minute continuous period. When you press <math>\Delta \nabla \triangleleft \triangleright</math>, the screensaver is cancelled and the screen before that screen saver started is displayed.</li> <li>• <b>OFF</b> : Screensaver is not activated.</li> </ul>  <p><b>Format</b> : Set the video signal format to be output for the TV you are using.</p> <ul style="list-style-type: none"> <li>• <b>NTSC</b> : Select NTSC output.</li> <li>• <b>PAL</b> : Select PAL output.</li> </ul> <p> "Format" can also be set by the following procedure. However, the menu screen is not displayed.</p> <ol style="list-style-type: none"> <li>1. Press and hold the main unit's <b>QUICK SELECT 1</b> and <b>SLEEP</b> for at least 3 seconds. "V.Format:&lt;PAL&gt;" appears on the display.</li> <li>2. Press the main unit's <b>QUICK SELECT 2</b>, <b>QUICK SELECT 3</b> and set the video signal format.</li> <li>3. Press the main unit's <b>iPod</b> <math>\blacktriangleright</math> to complete the setting.</li> </ol> <p><b>NOTE</b></p> <p>When a format other than the video format of the connected TV is set, the picture will not be displayed properly.</p> <p><b>Text</b> : Display the details of operation when switching surround mode, input mode, etc.</p> <ul style="list-style-type: none"> <li>• <b>ON</b> : Turn display on.</li> <li>• <b>OFF</b> : Turn display off.</li> </ul> <p><b>Master Volume</b> : Display the master volume during adjustment.</p> <ul style="list-style-type: none"> <li>• <b>Bottom</b> : Display at the bottom.</li> <li>• <b>Top</b> : Display at the top.</li> <li>• <b>OFF</b> : Turn display off.</li> </ul> <p> When the master volume display is hard to see when superimposed on movie subtitles, set to "Top".</p> <p><b>NET/USB</b> : Set the NET/USB screen display time when the input source is "NET/USB".</p> <ul style="list-style-type: none"> <li>• <b>Always</b> : Show display continuously.</li> <li>• <b>30s</b> : Show display for 30 seconds after operation.</li> <li>• <b>10s</b> : Show display for 10 seconds after operation.</li> <li>• <b>OFF</b> : Turn display off.</li> </ul>

Setting items	Setting details
<b>GUI</b> (Continued)	<p><b>iPod</b> : Set the iPod screen display time when the input source is "DOCK" or "iPod (USB)".</p> <ul style="list-style-type: none"> <li>• <b>Always</b> : Show display continuously.</li> <li>• <b>30s</b> : Show display for 30 seconds after operation.</li> <li>• <b>10s</b> : Show display for 10 seconds after operation.</li> <li>• <b>OFF</b> : Turn display off.</li> </ul>
<b>Remote Setup Guide</b> Search a preset code to register in the remote control unit.	See "Registering preset codes" ( <a href="#">page 83</a> ).
<b>Quick Sel.Name</b> Change the "Quick Select" display title to one you prefer.	<ul style="list-style-type: none"> <li>• Up to 16 characters can be input.</li> <li>• For character input, see <a href="#">page 57</a>.</li> </ul>
<b>Zone Rename</b> Change the display title of each zone to one you prefer.	<ul style="list-style-type: none"> <li>• Up to 10 characters can be input.</li> <li>• For character input, see <a href="#">page 57</a>.</li> </ul>
<b>Dimmer</b> Adjust the display brightness of this unit.	<p><b>Bright</b> : Normal display brightness. <b>Dim</b> : Reduced display brightness. <b>Dark</b> : Very low display brightness. <b>OFF</b> : Turns the display off.</p> <p> Buttons on the main unit can be used for operations. Each time <b>DIMMER</b> is pressed, the setting is changed as shown below.</p> 
<b>Setup Lock</b> Protect settings from inadvertent change.	<p><b>ON</b> : Turn protection on. <b>OFF</b> : Turn protection off.</p> <p> When canceling the setting, set "Setup Lock" to "OFF".</p> <p><b>NOTE</b></p> <p>When "Setup Lock" is set to "ON", the settings listed below can no longer be changed. Also, "SETUP LOCKED!" is displayed if you attempt to operate related settings.</p> <ul style="list-style-type: none"> <li>• Menu operations</li> <li>• Channel Level</li> </ul>



Setting items	Setting details												
<p><b>Firmware Update</b> Update the firmware of the receiver.</p> <p><b>NOTE</b> If the unit cannot connect to the network after updating the firmware, setup the network connection again through "Network Setup" (page 70) in the menu.</p>	<p><b>Check for Update</b> : Check for firmware updates. You can also check approximately how long it will take to complete an update. <b>Start</b> : Execute the update process. When updating starts, the power indicator becomes red and the menu screen is shut down. The amount of update time which has elapsed is displayed. When updating is complete, the power indicator becomes green and normal status is resumed.</p> <ul style="list-style-type: none"> <li>If updating fails, the set automatically retries, but if updating is still not possible, one of the messages shown below is displayed. If the display reads as shown below, check the settings and network environment, then update again.</li> </ul> <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>Updating fail</b></td> <td>Updating failed.</td> </tr> <tr> <td><b>Login failed</b></td> <td>Failure to log into server.</td> </tr> <tr> <td><b>Server is busy</b></td> <td>Server is busy. Wait a while then try again.</td> </tr> <tr> <td><b>Connection fail</b></td> <td>Failure in connecting to server.</td> </tr> <tr> <td><b>Download fail</b></td> <td>Downloading of the firmware has failed.</td> </tr> </tbody> </table>	Display	Description	<b>Updating fail</b>	Updating failed.	<b>Login failed</b>	Failure to log into server.	<b>Server is busy</b>	Server is busy. Wait a while then try again.	<b>Connection fail</b>	Failure in connecting to server.	<b>Download fail</b>	Downloading of the firmware has failed.
Display	Description												
<b>Updating fail</b>	Updating failed.												
<b>Login failed</b>	Failure to log into server.												
<b>Server is busy</b>	Server is busy. Wait a while then try again.												
<b>Connection fail</b>	Failure in connecting to server.												
<b>Download fail</b>	Downloading of the firmware has failed.												
<p><b>Add New Feature</b> Display new features that can be downloaded to this unit and perform an update.</p> <p><b>NOTE</b> If the unit cannot connect to the network after adding a new feature, setup the network connection again through "Network Setup" (page 70) in the menu.</p>	<p><b>Upgrade</b> : Execute the upgrade process. When updating starts, the power indicator becomes red and the menu screen is shut down. The amount of update time which has elapsed is displayed. When upgrading is complete, the power indicator becomes green and normal status is resumed.</p> <ul style="list-style-type: none"> <li>If the upgrade is not successful, an error message identical to those in "Firmware Update" will appear on the display. Check the settings and network environment, then update again.</li> </ul> <p><b>Upgrade Status</b> : Display a list of the additional functions provided by the upgrade.</p> <p> See the D&amp;M Professional website for details about updates. When the procedure is complete, "Registered" is displayed in this menu and updates can be carried out. If the procedure has not been carried out, "Not Registered" is displayed. The ID number shown on this screen is needed when carrying out the procedure. The ID number can also be displayed by pressing and holding the main unit's <b>QUICK SELECT 3</b> and <b>iPod</b> ► for at least 3 seconds.</p>												

Notes concerning use of "Firmware Update" and "Add New Feature"
<ul style="list-style-type: none"> <li>In order to use these functions, you must have the correct system requirements and settings for a broadband Internet connection (page 15).</li> <li>Do not turn off the power until updating or upgrading is completed.</li> <li>Even with a broadband connection to the Internet, approximately 1 hour is required for the updating/upgrading procedure to be completed.</li> <li>Once updating/upgrade starts, normal operations on this unit cannot be performed until updating/upgrading is completed.</li> <li>Furthermore, updating/upgrading the firmware may reset the backup data for the parameters, etc. set for this unit.</li> <li>If the update or upgrade fails, press and hold the <b>ON/STANDBY</b> on the main unit for more than 5 seconds, or remove and re-insert the power cord. "Update retry" appears on the display and update restarts from the point at which update failed. If the error continues despite this, check the network environment.</li> </ul>



- Information regarding the "Firmware Update" function and "Add New Feature" will be announced on the D&M Professional web site each time related plans are defined.
- When usable new firmware is released with "Firmware Update" or "Add New Feature", a notification message is displayed on the menu screen. When you do not want to be notified, set "Notification" – "Update" (page 72) and "Upgrade" (page 72) to "OFF".

## Language

Default settings are underlined.

Set the language for display on the menu screen.

---

### Setting details

---

#### English / Español



"Language" can also be set by the following procedure. However, the menu screen is not displayed.

**1.** Press and hold the main unit's **QUICK SELECT 1** and **SLEEP** for at least 3 seconds.

"V.Format:<PAL>" appears on the display.

**2.** Press the main unit's **STATUS** and set "Lang:<ENGLISH >".

**3.** Press the main unit's **QUICK SELECT 2, QUICK SELECT 3** and set the language.

**4.** Press the main unit's **iPod ►** to complete the setting.

---



Perform settings related to input source playback.

- You do not have to change the settings to use the unit. Make settings when needed.

## Menu operation

**1** Press **ZONE SELECT** to switch the zone mode to **[M]** (MAIN ZONE).

The **[M]** indicator lights.

**2** Press **AMP** to set the remote control unit to AMP-operation mode.

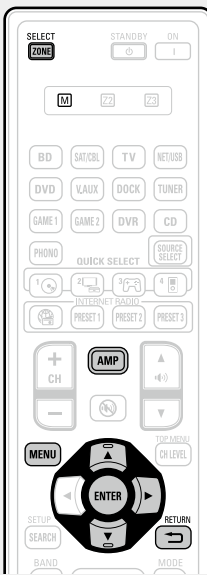
**3** Press **MENU**.

The menu is displayed on the TV screen.

**4** Use  $\Delta$ / $\nabla$  to select the menu to be set or operated.

**5** Press **ENTER** or  $\triangleright$  to enter the setting.

- To return to the previous item, press **RETURN**  $\leftarrow$ .
- Exiting the Menu, press **MENU** while the menu is displayed. The menu display disappears.



## Items that can be set with the "Input Setup" procedure

Input Assign ([page 78](#))

Video ([page 79](#))

Input Mode (Audio) ([page 80](#))

Rename ([page 80](#))

Source Level (Audio) ([page 80](#))

Playback Mode ([page 81](#))

Still Picture ([page 81](#))

## Important information

### □ About the display of input sources

In this section, the configurable input sources for each item are shown as follows.



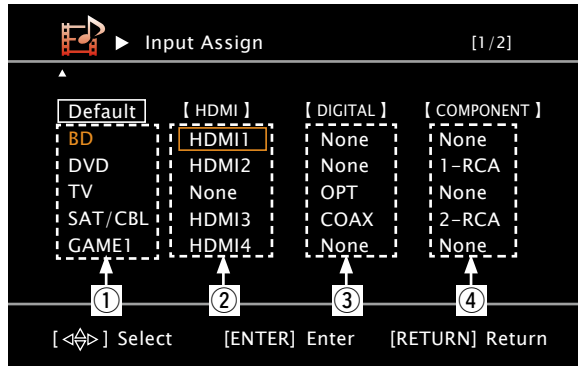
### NOTE

Input sources that have been set to "Delete" at "Source Delete" ([page 73](#)) cannot be selected.

# Input Assign

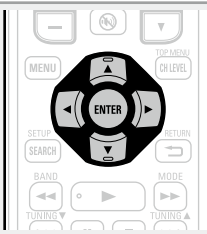
## Examples of "Input Assign" menu screen displays

This screen appears when the "Input Setup" – "each input source" – "Input Assign" menu is selected. Use the "Input Assign" menu to change the ② HDMI input connectors, ③ Digital input connectors, and ④ component input connectors that are assigned to the ① input sources in default settings.



## Input assignments menu operations

- 1** Use  $\Delta \nabla \triangleleft \triangleright$  to move the highlight to the item you want to set.
- 2** Press **ENTER**, then use  $\triangleleft \triangleright$  to select the input connector to be assigned.
- 3** Press **ENTER** to register the setting.



Setting items	Setting details
---------------	-----------------

**HDMI**  
Set this to change the HDMI input connectors assigned to the input sources.

BD	DVD	TV
SAT/CBL		GAME1
GAME2	V.AUX	DOCK

**HDMI 1 / HDMI 2 / HDMI 3 / HDMI 4 / HDMI 5 / HDMI 6**  
**None** : Do not assign an HDMI input connector to the selected input source.

- At time of purchase, the settings of the different input sources are as shown below.

Input source	BD	DVD	TV	SAT/CBL
<b>Default setting</b>	HDMI 1	HDMI 2	None	HDMI 3

Input source	GAME1	GAME2	V.AUX	DOCK
<b>Default setting</b>	HDMI 4	HDMI 5	HDMI 6	None

- An input source to which an HDMI input connector cannot be assigned is displayed as "----".
- To play the video signal assigned at "HDMI" combined with the audio signal assigned at "Input Assign" – "DIGITAL", select "Digital" at "Input Mode" (page 80).
- The audio signals input from the analog and digital connectors are not output to the monitor.
- When a control dock for iPod is connected, signals cannot be assigned to the HDMI connectors.
- When "HDMI Control" (page 68) is set to "ON", HDMI input connector cannot be assigned to "TV".

**DIGITAL**  
Set this to change the digital input connectors assigned to the input sources.



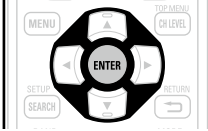
BD	DVD	TV
SAT/CBL		GAME1
GAME2	V.AUX	DOCK
CD		

**COAX (coaxial) / OPT (optical)**  
**None** : Do not assign a digital input connector to the selected input source.

- At time of purchase, the settings of the different input sources are as shown below.

Input source	BD	DVD	TV	SAT/CBL	GAME1
<b>Default setting</b>	None	None	OPT	COAX	None

Input source	GAME2	V.AUX	DOCK	CD
<b>Default setting</b>	None	None	None	None



Setting items	Setting details																													
<p><b>COMPONENT</b> (Component video) Set this to change the component video input connectors assigned to the input sources.</p> <table border="1"> <tr> <td>BD</td> <td>DVD</td> <td>TV</td> </tr> <tr> <td>SAT/CBL</td> <td>GAME1</td> <td></td> </tr> <tr> <td>GAME2</td> <td>V.AUX</td> <td>DOCK</td> </tr> </table>	BD	DVD	TV	SAT/CBL	GAME1		GAME2	V.AUX	DOCK	<p><b>RCA</b> (Video component) <b>1, 2</b> <b>None</b> : Do not assign a component video input connector to the selected input source.</p> <ul style="list-style-type: none"> <li>At time of purchase, the settings of the different input sources are as shown below.</li> </ul> <table border="1"> <tr> <td><b>Input source</b></td> <td><b>BD</b></td> <td><b>DVD</b></td> <td><b>TV</b></td> <td><b>SAT/CBL</b></td> </tr> <tr> <td><b>Default setting</b></td> <td>None</td> <td><b>1-RCA</b></td> <td>None</td> <td><b>2-RCA</b></td> </tr> </table> <table border="1"> <tr> <td><b>Input source</b></td> <td><b>GAME1</b></td> <td><b>GAME2</b></td> <td><b>V.AUX</b></td> <td><b>DOCK</b></td> </tr> <tr> <td><b>Default setting</b></td> <td>None</td> <td>None</td> <td>None</td> <td>None</td> </tr> </table> <p></p> <ul style="list-style-type: none"> <li>An input source to which an component video input connector cannot be assigned is displayed as “---”.</li> <li>When a control dock for iPod is connected, signals cannot be assigned to the component video connectors.</li> </ul>	<b>Input source</b>	<b>BD</b>	<b>DVD</b>	<b>TV</b>	<b>SAT/CBL</b>	<b>Default setting</b>	None	<b>1-RCA</b>	None	<b>2-RCA</b>	<b>Input source</b>	<b>GAME1</b>	<b>GAME2</b>	<b>V.AUX</b>	<b>DOCK</b>	<b>Default setting</b>	None	None	None	None
BD	DVD	TV																												
SAT/CBL	GAME1																													
GAME2	V.AUX	DOCK																												
<b>Input source</b>	<b>BD</b>	<b>DVD</b>	<b>TV</b>	<b>SAT/CBL</b>																										
<b>Default setting</b>	None	<b>1-RCA</b>	None	<b>2-RCA</b>																										
<b>Input source</b>	<b>GAME1</b>	<b>GAME2</b>	<b>V.AUX</b>	<b>DOCK</b>																										
<b>Default setting</b>	None	None	None	None																										
<p><b>Default</b> The “Input Assign” settings are returned to the default settings.</p>	<p><b>Yes</b> : Reset to the defaults. <b>No</b> : Do not reset to the defaults.</p> <p> If you select “Default” and press <b>ENTER</b>, the message “Return settings to the default?” is displayed. Select “Yes” or “No”, and then press <b>ENTER</b>.</p> 																													

## Video

Default settings are underlined.

Set the source video.



\* “BD”, “TV”, “GAME1” or “GAME2” can be set when “HDMI” ([page 78](#)) or “COMPONENT” ([page 79](#)) has been assigned.

Setting items	Setting details									
<p><b>Video Select</b> Video of another input source is played back combined with the playing audio.</p>	<p><b>Source</b> : Play the picture and sound of the input source. <b>BD / DVD / TV / SAT/CBL / GAME1 / GAME2 / V.AUX / DOCK</b> : Select video input source to view. This can be set for individual input sources.</p> <p> “BD”, “TV”, “GAME1” and “GAME2” can be selected only when a component video is assigned as an input source.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>It is not possible to select HDMI input signals.</li> <li>Input sources for which “Delete” is selected at “Source Delete” (<a href="#">page 73</a>) cannot be selected.</li> </ul>									
<p><b>Video Mode</b> Make settings for video processing.</p> <table border="1"> <tr> <td>BD *</td> <td>DVD</td> <td>TV *</td> </tr> <tr> <td>SAT/CBL</td> <td>GAME1 *</td> <td></td> </tr> <tr> <td>GAME2 *</td> <td>V.AUX</td> <td>DOCK</td> </tr> </table>	BD *	DVD	TV *	SAT/CBL	GAME1 *		GAME2 *	V.AUX	DOCK	<p><b>Auto</b> : Process video automatically based on the HDMI content information. <b>Game</b> : Always process video appropriate for game content. <b>Movie</b> : Process video normally.</p> <p></p> <ul style="list-style-type: none"> <li>If “Video Mode” is set to “Auto”, the mode is switched according to the input contents.</li> <li>If a source is played in both MAIN ZONE (audio and video) and ZONE2 (audio only) modes in the same room, audio in MAIN ZONE and ZONE2 modes may sound out of synchronization, but this is not malfunction. In this case, setting to “Game” mode may improve audio synchronization.</li> </ul>
BD *	DVD	TV *								
SAT/CBL	GAME1 *									
GAME2 *	V.AUX	DOCK								

## Input Mode (Audio)


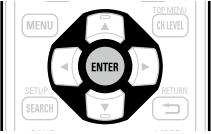
Default settings are underlined.

The input modes available for selection may vary depending on the input source.

Setting items	Setting details												
<p><b>Input Mode</b> Set the audio input modes for the different input sources. It is normally recommended to set the audio input mode to "Auto".</p>	<p><b>Auto</b> : Automatically detect input signal and perform playback. <b>HDMI</b> : Play only signals from HDMI input. <b>Digital</b> : Play only signals from digital input. <b>Analog</b> : Play only signals from analog input.</p> <p> <ul style="list-style-type: none"> <li>"HDMI" can be set for input sources for which "HDMI" is assigned at "Input Assign" (<a href="#">page 78</a>).</li> <li>"Digital" can be set for input sources for which "DIGITAL" is assigned at "Input Assign" (<a href="#">page 78</a>).</li> <li>If the input source is set to "TV", "GAME1" or "GAME2", it cannot be set to "Analog".</li> <li>When digital signals are properly input, the <b>DIG</b> indicator lights on the display. If the <b>DIG</b> indicator does not light, check the digital input connector assignment and the connections.</li> <li>If "HDMI Control" is set to "ON" and a TV compatible with the ARC is connected via the HDMI MONITOR connectors, the input mode whose input source is "TV" is fixed to ARC.</li> </ul> </p>												
<p><b>Decode Mode</b> Set the audio decode mode for input source.</p> <table border="1" data-bbox="114 842 353 975"> <tr> <td>BD</td> <td>DVD</td> <td>TV</td> </tr> <tr> <td>SAT/CBL</td> <td colspan="2">GAME1</td> </tr> <tr> <td>GAME2</td> <td>V.AUX</td> <td>DOCK</td> </tr> <tr> <td>CD</td> <td colspan="2"></td> </tr> </table>	BD	DVD	TV	SAT/CBL	GAME1		GAME2	V.AUX	DOCK	CD			<p><b>Auto</b> : Detect type of digital input signal and decode and play automatically. <b>PCM</b> : Decode and play only PCM input signals. <b>DTS</b> : Decode and play only DTS input signals.</p> <p> <ul style="list-style-type: none"> <li>This item can be set for input sources for which "HDMI" or "DIGITAL" is assigned at "Input Assign" (<a href="#">page 78</a>).</li> <li>Normally set this mode to "Auto". Set "PCM" and "DTS" when inputting the corresponding input signal.</li> </ul> </p>
BD	DVD	TV											
SAT/CBL	GAME1												
GAME2	V.AUX	DOCK											
CD													

## Rename

Change the display name of the selected input source.

Setting items	Setting details
<p><b>Rename</b> Change the display name of the selected input source.</p>	<ul style="list-style-type: none"> <li>Up to eight characters can be input.</li> <li>For character input, see <a href="#">page 57</a>.</li> </ul>
<p><b>Default</b> The input source name is returned to the default setting.</p>	<p><b>Yes</b> : Reset to the defaults. <b>No</b> : Do not reset to the defaults.</p> <p> If you select "Default" and press <b>ENTER</b>, the message "Return settings to the default?" is displayed. Select "Yes" or "No", and then press <b>ENTER</b>.</p> 


## Source Level (Audio)

Default settings are underlined.

- This function corrects the playback level of the selected input source's audio input.
- Make this setting if there are differences in the input volume levels between the different sources.

### Setting details

#### -12dB - +12dB (0dB)

-  The analog input level and digital input level can be adjusted independently for input sources for which "HDMI" or "DIGITAL" is assigned at "Input Assign" ([page 78](#)).

## Playback Mode

Default settings are underlined.

### ☐ Input source : "DOCK"

Setting items	Setting details
<b>Repeat</b> Make settings for repeat mode.  <input type="button" value="DOCK"/>	<b>All</b> : All files are played repeatedly. <b>One</b> : A file being played is played repeatedly. <b>OFF</b> : Repeat playback mode is canceled.
<b>Shuffle</b> Make settings for shuffle mode.  <input type="button" value="DOCK"/>	<b>Songs</b> : Shuffle songs. <b>Albums</b> : Shuffle albums. <b>OFF</b> : Shuffle playback mode is canceled.

### ☐ Input source : "NET/USB"

Setting items	Setting details
<b>Repeat</b> Make settings for repeat mode.  <input type="button" value="Media Server"/> <input type="button" value="USB/iPod"/>	<b>All</b> : All files are played repeatedly (All files in a Folder or an album are played repeatedly). <b>One</b> : A file being played is played repeatedly. <b>OFF</b> : Repeat playback mode is canceled.
<b>Random</b> Make random mode settings.  <input type="button" value="Media Server"/> <input type="button" value="USB/iPod"/>	<b>ON</b> : Enable random playback. <b>OFF</b> : Disable random playback.

## Still Picture

Default settings are underlined.

Make settings for playing back still picture images.

Setting items	Setting details
<b>Slide Show</b> Make slide show settings.  <input type="button" value="NET/USB"/>	<b>ON</b> : Display still picture images in a slide show. <b>OFF</b> : The slide show is not played back.
<b>Interval</b> Set the time for displaying a single image when playing back images in the slide show.  <input type="button" value="NET/USB"/>	<b>5s – 60s</b>

# Operating the connected devices by remote control unit

Registering the supplied preset codes in the remote control unit enables you to operate devices made by other manufacturers.

## Operating AV devices

### 1 Press **ZONE SELECT** to select a zone for operation.

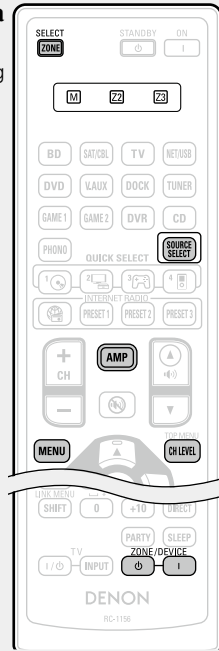
The zone mode indicator corresponding to the operating zone lights.

- The mode switches each time **ZONE SELECT** is pressed.

**M** Select for the operations in MAIN ZONE.

**Z2** Select for the operations in ZONE2.

**Z3** Not used.



### 2 Press the input source select button (page 19).

- The input source for the zone selected in step 1 is switched.
- The operation mode of the remote control unit is switched as shown in the table.

Input source select button	Input source of this unit	Operation mode
		Devices controllable with the remote control unit
<b>AMP</b>	–	This unit (AMP-operation) *2
<b>BD</b> *1	BD	Device registered on the <b>BD</b> button
<b>SAT/CBL</b> *1	SAT/CBL	Device registered on the <b>SAT/CBL</b> button
<b>TV</b> *1	TV	Device registered on the <b>TV</b> button
<b>NET/USB</b>	NET/USB	Network function
<b>DVD</b> *1	DVD	Device registered on the <b>DVD</b> button
<b>V.AUX</b> *1	V.AUX	Device registered on the <b>V.AUX</b> button
<b>DOCK</b>	DOCK	Control dock for iPod
<b>GAME 1</b> *1	GAME1	Device registered on the <b>GAME1</b> button
<b>GAME 2</b> *1	GAME2	Device registered on the <b>GAME2</b> button
<b>CD</b> *1	CD	Device registered on the <b>CD</b> button

\*1 If a preset code is registered for this button, the remote control unit of this unit can control another devices.

\*2 This operation mode enables you to operate iPod, USB, Control dock for iPod, Network function.



When the **SOURCE SELECT** is pressed, the AMP-operation mode starts automatically.

### NOTE

If the mode of the remote control unit is set to other than AMP-operation mode, press **AMP** to switch the remote control unit to the AMP-operation mode to perform the following operations:

- For menu operation by pressing **MENU**
- For setting the channel level of the unit by pressing **CH LEVEL**
- For turning power in each zone on or off by pressing **ZONE/DEVICE I** or **ZONE/DEVICE 0**.

### 3 Operate this unit or the device whose input source is switched.

• For details, refer to the operating instructions for each device. For operations of iPod and USB memory device, see the following pages.


- iPod (page 22, 24)
- Network function (page 29)
- USB memory device (page 32)



## Registering preset codes

When preset codes are registered in the included remote control unit, it can then be used to operate any devices you have, such as DVD players or TVs made by different manufacturers. In this menu, you can search and display the preset codes that can be preset in the included remote control unit.










### Buttons used for operating the devices

- ① **ZONE/DEVICE I, ZONE/DEVICE 0**  
For switching power of each device on or off.
- ② **Δ∇◀▶, ENTER, RETURN**   
For menu operation of each device.
- ③ **MENU, SETUP, TOP MENU**  
For displaying the menu of each device.
- ④ **▶, ■, II, ◀◀, ▶▶, I◀◀, ▶▶I**
- ⑤ Number button (0 – 9, +10)
- ⑥ **CH +, CH –**
- ⑦ **TV I/0, TV INPUT**  
For operating a TV.  
This button is enabled in any mode.

For details on operation with the remote control unit, see pages [22](#), [24](#), [29](#), [32](#), [86](#).

### Default settings for preset codes

The devices shown below are registered for each input source button as default. Settings can be changed according to the devices to be used.

Input source select button	Category	Brand	Preset code
	Blu-ray Disc player	DENON	<b>32258</b>
	Satellite set top box	DirecTV	<b>01377</b>
	Television	SONY	<b>10810</b>
	DVD player	DENON	<b>32134</b>
	Digital camcorder (DVD recorder)	Panasonic	<b>21378</b>
	Control dock for iPod	DENON	<b>72516</b>
	Cable set top box	Motorola	<b>01376</b>
	Cable set top box	Scientific Atlanta	<b>01877</b>
	CD player	DENON	<b>42867</b>

\* If a control dock for iPod is not to be used, the preset code for another device can be set to **DOCK**.

### NOTE

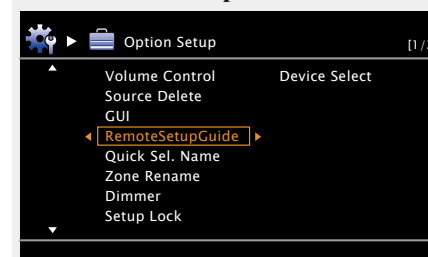
The preset code cannot be registered to **NET/USB** or **PHONO**.

**1** Press **ZONE SELECT** to switch the zone mode to **M** (MAIN ZONE).  
The **M** indicator lights.

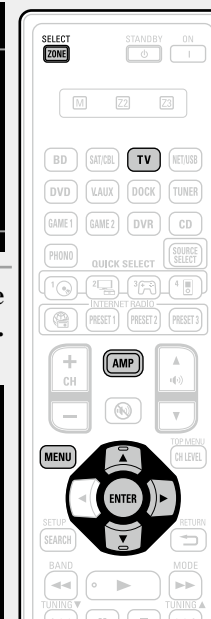
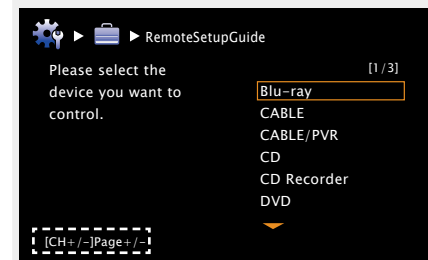
**2** Press **AMP** to set the remote control unit to AMP-operation mode.

**3** Press **MENU**.  
The menu is displayed on the TV screen.

**4** Use **Δ∇** to select “System Setup” – “Option Setup” – “Remote Setup Guide” and then press **ENTER** or **▶**.

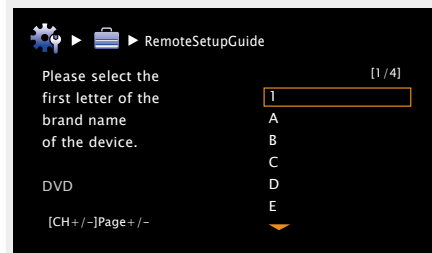


**5** Pressing **Δ∇**, select the device category for preset registration. Then press **ENTER**.



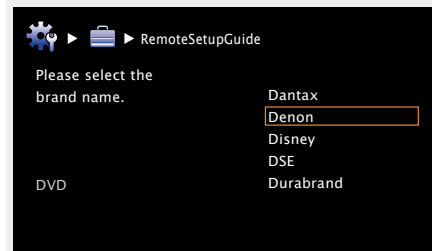
- For “TV”, “TV/DVD” or “TV/VCR” categories, only the preset code for **TV** can be registered.
- The pages can be switched by pressing the remote control unit’s **CH +** or **CH –**.

### 6 Pressing $\Delta$ / $\nabla$ , select the first letter of the device brand name. Then press **ENTER**.



- The first character is displayed as 1, A to Z. (Initials for the brand are displayed for each category.)  
For brand names that start with numbers and symbols, select "1".
- When there are several pages of brand names, the pages can be switched by pressing the remote control unit's **CH +** or **CH -**.

### 7 Pressing $\Delta$ / $\nabla$ , select the device brand name. Then press **ENTER**.

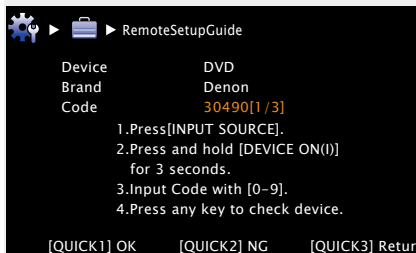


- When there are several pages of brand names, the pages can be switched by pressing the remote control unit's **CH +** or **CH -**.

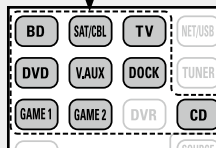
**NOTE**

If the desired brand name is not listed, the supplied remote control unit cannot control the device. Use the remote control unit supplied with the device to be used.

### 8 The procedures for registering remote control codes and remote control preset registration are displayed.

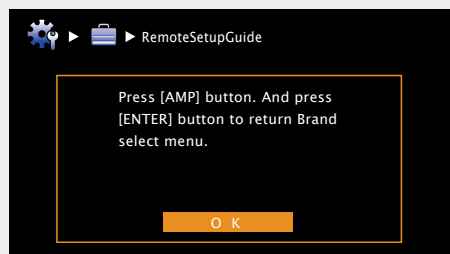


Input source select buttons



**NOTE**

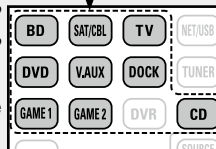
If a wrong brand name is selected, press **QUICK SELECT 3**. The following screen is displayed:



Press **AMP** then **ENTER** to return to step 7.

### 9 Press the input source button on which the preset code is to be registered (BD, SAT/CBL, TV, DVD, V.AUX, DOCK, GAME1, GAME2 or CD).

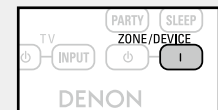
Input source select buttons



- For **TV**, only the preset code for the categories "TV", "TV/DVD" or "TV/VCR" can be registered.

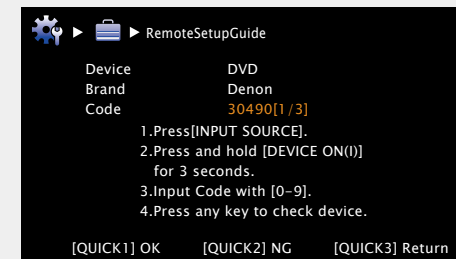
### 10 Press and hold **ZONE/DEVICE I** for at least 3 seconds.

The zone mode indicator flashes twice.



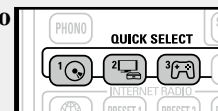
### 11 Enter a five-digit code using 0-9.

Press the buttons with an interval less than 10 seconds.



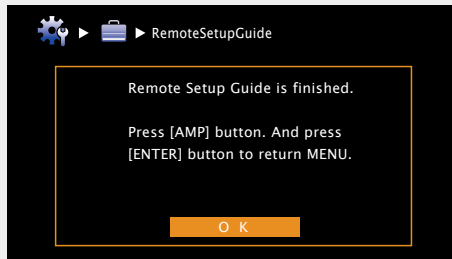
- When the code is registered.  
→ The zone mode indicator flashes twice.
- When the code is not registered correctly  
→ The mode indicator slowly flashes once. Perform from step 9 again.
- When an input number is not correct  
→ Press **ON** once then perform the operations from step 9 again.

### 12 Operate the device being used to check the operation.



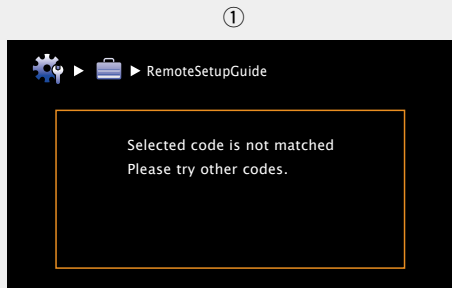
- If the device is operating, press **QUICK SELECT 1**.  
→ Go to step 13.
- If the device is not operating, press **QUICK SELECT 2**.  
→ Go to step 14.

**13** The screen shown below is displayed, and registration of the preset code is completed.

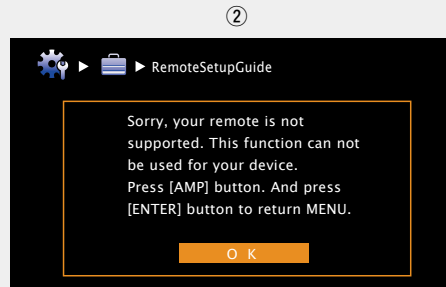


- The menu screen is retrieved. Press **AMP** then **ENTER**.

**14** Either of the screens below is displayed.



- The screen is displayed for 3 seconds, then the next preset registration screen is displayed automatically.



**【If screen ① is displayed】**

The device may be operating with the preset code displayed next. The preset registration screen is displayed. Repeat steps 9 to 12.

**【If screen ② is displayed】**

The device cannot be controlled with the remote control unit supplied with this unit. Use the remote control unit supplied with the device to be used. The menu screen is retrieved. Press **AMP** then **ENTER**.



Some manufacturers use more than one type of remote control code. Preset codes to change the number and verify correct operation.

**NOTE**

Depending on the model and year of manufacture of your device, some buttons may not operate.

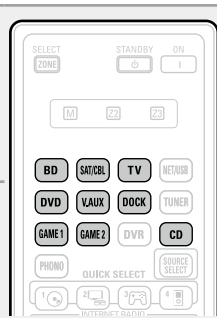
# Operating devices

The supplied remote control unit can control a device other than this unit.

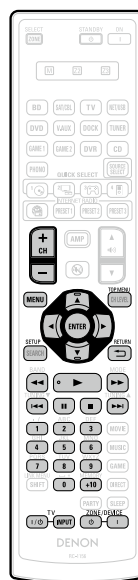
**1** Press the input source select button to which the preset code for the device you want to operate has been registered (page 82).

**2** Operate the device.

• For details, refer to the device's operating instructions.



## Blu-ray Disc player / HD-DVD player / DVD player operation



Operation buttons	Function
<b>CH +, -</b>	Switch channels (up/down)
<b>MENU</b>	(Popup) Menu
<b>TOP MENU</b>	Top menu
$\triangle \nabla \triangleleft \triangleright$	Cursor operation
<b>ENTER</b>	Enter
<b>SETUP</b>	Setup
<b>RETURN</b> $\curvearrowright$	Return
$\triangleleft \triangleright \triangleright \triangleright$	Manual search (fast-reverse/fast-forward)
$\triangleright$	Playback
$\triangleleft \triangleleft \triangleright \triangleright \triangleright$	Auto search (cue)
<b>II</b>	Pause
$\blacksquare$	Stop
<b>0 - 9, +10</b>	Select title, chapter or channel selection
<b>TV I / <math>\phi</math></b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)
<b>ZONE/DEVICE I</b>	Power on*
<b>ZONE/DEVICE <math>\phi</math></b>	Power standby*

\* This may power some devices on/standby.

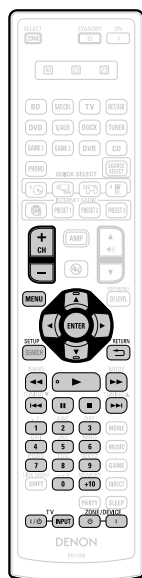
## CD player / CD recorder operation



Operation buttons	Function
$\triangle \nabla \triangleleft \triangleright$	Cursor operation
<b>ENTER</b>	Enter
$\triangleleft \triangleright \triangleright \triangleright$	Manual search (fast-reverse/fast-forward)
$\triangleright$	Playback
$\triangleleft \triangleleft \triangleright \triangleright \triangleright$	Auto search (cue)
<b>II</b>	Pause
$\blacksquare$	Stop
<b>0 - 9, +10</b>	Track selection
<b>TV I / <math>\phi</math></b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)
<b>ZONE/DEVICE I</b>	Power on*
<b>ZONE/DEVICE <math>\phi</math></b>	Power standby*

\* This may power some devices on/standby.

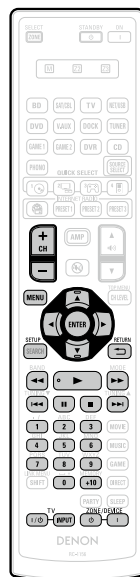
❑ DVD recorder (DVR) / Personal video recorder (PVR) / Video cassette recorder (VCR) operation



Operation buttons	Function
<b>CH +, -</b>	Switch channels (up/down)
<b>MENU</b>	Menu
<b>Δ▽◀▶</b>	Cursor operation
<b>ENTER</b>	Enter
<b>SETUP</b>	Setup
<b>RETURN ↩</b>	Return
<b>◀▶▶▶</b>	Manual search (fast-reverse/fast-forward)
<b>▶</b>	Playback
<b>◀◀▶▶▶</b>	Auto search (cue)
<b>⏸</b>	Pause
<b>■</b>	Stop
<b>0 - 9, +10</b>	Select title, chapter or channel selection
<b>TV I / ⏻</b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)
<b>ZONE/DEVICE I</b>	Power on*
<b>ZONE/DEVICE ⏻</b>	Power standby*

\* This may power some devices on/standby.

❑ TV operation



Operation buttons	Function
<b>CH +, -</b>	Switch channels (up/down)
<b>MENU</b>	Menu
<b>Δ▽◀▶</b>	Cursor operation
<b>ENTER</b>	Enter
<b>SETUP</b>	Setup
<b>RETURN ↩</b>	Return
<b>◀▶▶▶</b>	Manual search (fast-reverse/fast-forward)
<b>▶</b>	Playback
<b>◀◀▶▶▶</b>	Auto search (cue)
<b>⏸</b>	Pause
<b>■</b>	Stop
<b>0 - 9, +10</b>	Channel selection
<b>TV I / ⏻</b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)
<b>ZONE/DEVICE I</b>	Power on*
<b>ZONE/DEVICE ⏻</b>	Power standby*

\* This may power some devices on/standby.

❑ Set top box for satellite (SAT) / Cable (CBL) / IP TV operation



Operation buttons	Function
<b>CH +, -</b>	Switch channels (up/down)
<b>MENU</b>	Menu
<b>Δ▽◀▶</b>	Cursor operation
<b>ENTER</b>	Enter
<b>SETUP</b>	Guide
<b>RETURN ↩</b>	Return
<b>◀▶▶▶</b>	Manual search (fast-reverse/fast-forward)
<b>▶</b>	Playback
<b>◀◀▶▶▶</b>	Auto search (cue)
<b>⏸</b>	Pause
<b>■</b>	Stop
<b>0 - 9, +10</b>	Channel selection
<b>TV I / ⏻</b>	TV power on/standby (Default : SONY)
<b>TV INPUT</b>	Switch TV input (Default : SONY)
<b>ZONE/DEVICE I</b>	Power on*
<b>ZONE/DEVICE ⏻</b>	Power standby*

\* This may power some devices on/standby.

## Specifying the zone used with the main remote control unit

When the **ZONE SELECT** button is pressed, only the set zone can be operated with the remote control unit.

### 1 Press and hold **ZONE/DEVICE 1** for at least 3 seconds.

The zone mode indicator flashes twice.

### 2 Press **ZONE SELECT**.

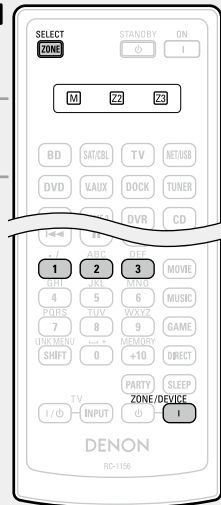
The zone mode indicator flashes twice.

### 3 Press **1 – 3** to set.

The zone mode indicator flashes twice.

#### [Settable items]

- 1 When only using "MAIN ZONE"
- 2 When using "MAIN ZONE" / "ZONE2"
- 3 When using "MAIN ZONE" / "ZONE2" / "ZONE3" (Default)



## Resetting the remote control unit

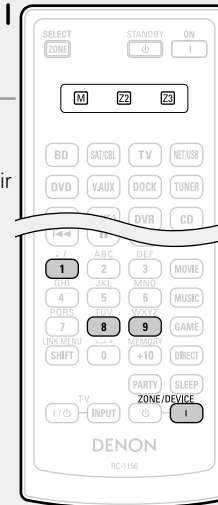
Settings for the remote control unit are returned to the default values.

### 1 Press and hold **ZONE/DEVICE 1** for at least 3 seconds.

The zone mode indicator flashes twice.

### 2 Press **9, 8 and 1**, in that order.

The 'M' indicator flashes four times.  
All the settings are restored to their defaults.



# Serial remote control

In the Serial remote control function, a host such as a computer is connected to the unit. By sending control commands from the host to the unit, the unit can be operated, and the status information of the unit can be checked both on the unit and host. There are 2 methods for connecting the host and unit, namely RS-232C control and IP Control.

## RS-232C control

You will be able to perform the three control functions from the host by connecting an RS-232C straight cable to the RS-232C serial terminal (9-pin D-sub) connector.

### [Three control functions]

- ① **Controlling and operating this unit from the host** (☞ [page 92](#)).
- ② **Sending the status information to the host when this unit receives a status request command from the host** (☞ [page 92](#)).
- ③ **Automatically sending the status information to the host when there is a change to the unit status** (☞ [page 92](#)).

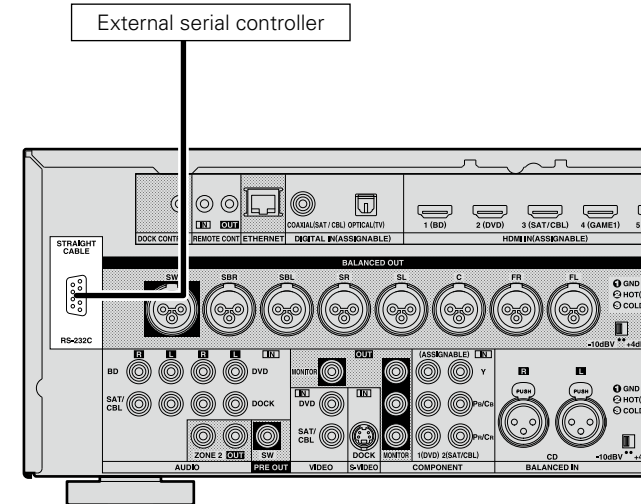
### □ Communication format

- Compatible Connector: 9-pin D-sub (male)
- Communication speed: 9,600 bps
- Data Bit: 8 bit
- Parity: None
- Stop Bit: 1 bit
- Flow Control: None

### Pin Arrangement

Pin Number	Signal Name
1	Ground
6	NC
2	TxD
7	NC
3	RxD
8	NC
4	NC
9	NC
5	S. Ground

### □ Connections



## IP Control (Ethernet)

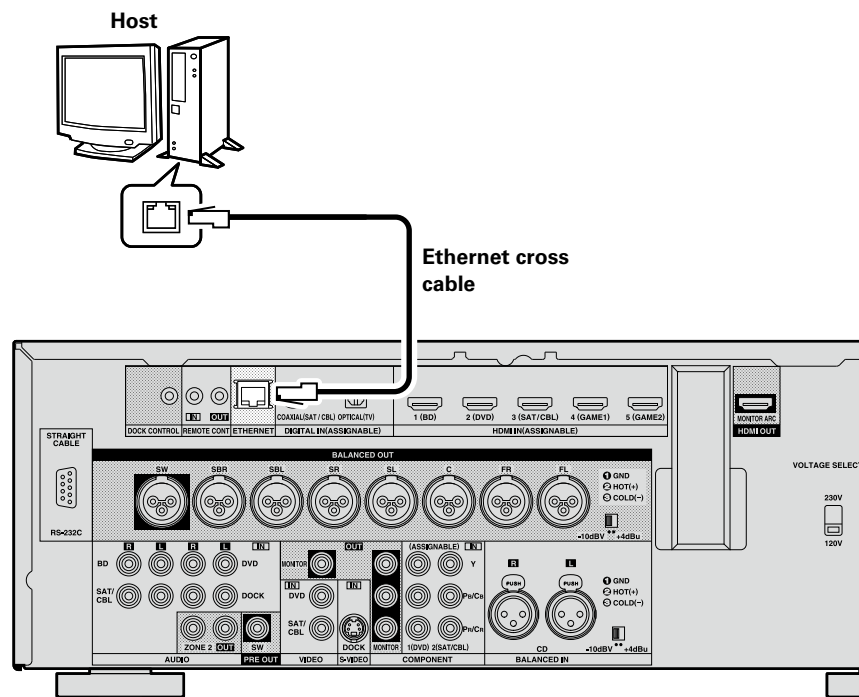
You will be able to perform the three control functions from the host by connecting an Ethernet cable to the ethernet connector (Connector type:RJ-45 (10BASE-T/100BASE-TX)).

### Communication format

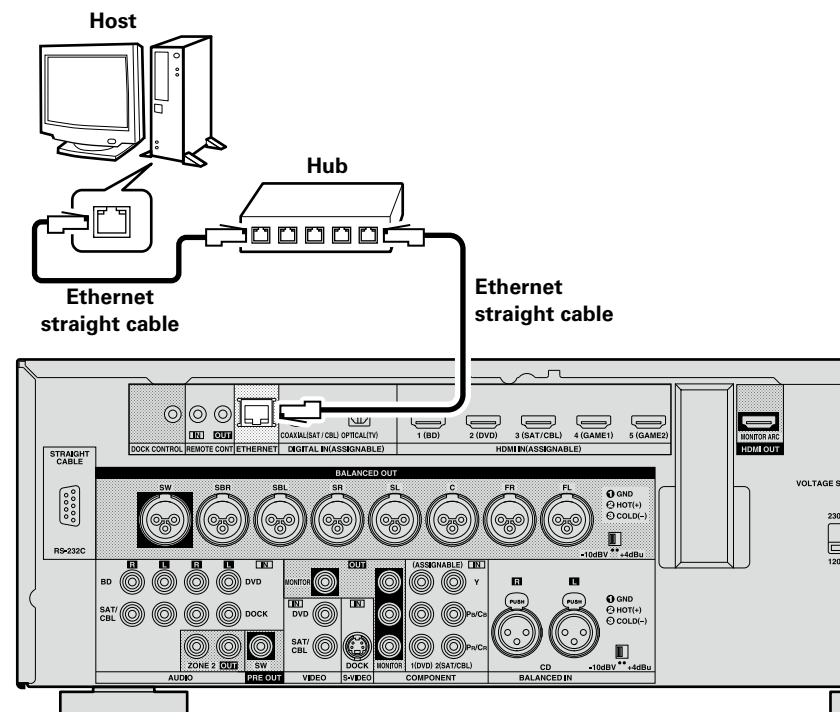
- Communication system: A full duplex
- Communication speed: 10 Mbps/100 Mbps
- Communication port: TCP port 23 (telnet)
- Communication data length: 135 bytes (maximum)

### Connections

#### Connecting the unit and host directly



#### Connecting the unit and host via a hub





# Communication protocol

The following three data forms are defined.

## COMMAND

The message sent to a system from a host.

A command to a system is given from a host. Refer to the following table for the contents of "Control command code table" ([page 93](#)).

## RESPONSE

The message is sent to a host from a system if the 'request command' (COMMAND+?+CR(0x0D)) has come from a host.

The RESPONSE should be sent within 200 ms of receiving the COMMAND.

The form of RESPONSE presupposes that it is the same as that of EVENT.

Refer to the following table for the contents of "Status request and status information code table" ([page 102](#)).

## EVENT

The message sent to a host from a system.

The result is sent, when a system is operated directly and a state changes.

The form of EVENT presupposes that it is the same as that of COMMAND.

Refer to the following table for the contents of "Status request and status information code table" – "Status request and status information code table" ([page 102](#)).

## Basic specification

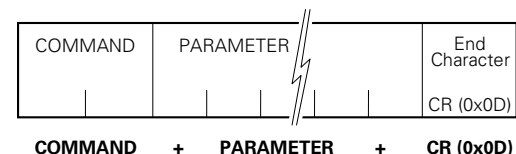
The command by ASCII CODE, parameter expression.

### NOTE

ASCII CODE which can be used is from 0x20 to 0x7F: the alphabet and the number of 0 – 9, and space (0x20), some signs, and carriage return (0x0D) — It is used only as a pause sign.

## Structure of control commands

Each packet of a control command begins with the COMMAND and ends with the End Character "0x0D" as shown below.



**COMMAND:** ASCII CODE of 2 characters

**PARAMETER:** ASCII CODE (up to 25 characters)

### NOTE

To confirm the status information of the unit, send COMMAND + ? + CR to the unit from the host.

The unit status information is sent to the host.

For "Status request and status information code table" ([page 102](#)).

## Structure of command codes

Item	Value (The hex value is indicated in parentheses)
COMMAND	Indicate a description of the command.
PARAMETER	Indicate a description of the parameter.
End Character	'CR'(0 x 0D)

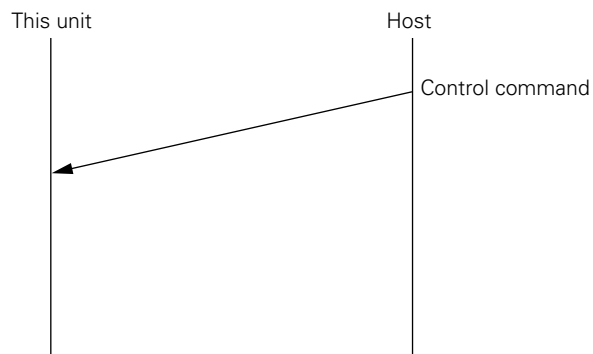
The response time out is 200 msec.



- When a command is received, this unit responds within 200 msec.
- Allow an interval of at least 200 msec between commands when sending a series of commands from the host. This unit will not receive commands when the interval is less than 200 msec.
- COMMAND is receivable also during transmission of EVENT.
- Do not send request commands from the host until this unit returns a RESPONSE.
- 1 seconds later, please transmit the next COMMAND after transmitting a power on COMMAND (PWON).

❑ ① **Controlling and operating this unit from the host**

When this unit receives a control command from the host, the unit executes the command.

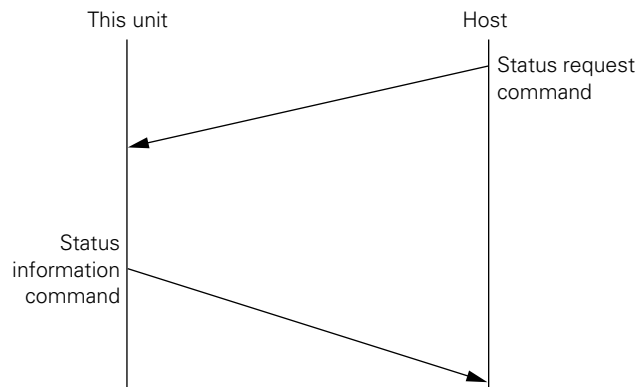


Handshake flow charts for control command

- For “Control command code table” ([page 93](#)).

❑ ② **Sending the status information for a status request command from the host**

When this unit receives a status request command from the host, the unit responds the status information.

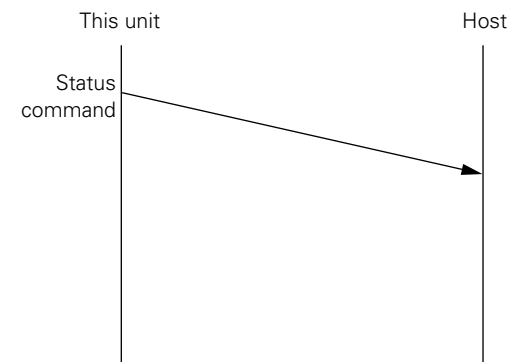


Handshake flow charts for status request command

- For “Status request and status information code table” ([page 102](#)).

❑ ③ **Automatically sending the status information when there is a change to the unit status**

When there is a change to the unit status, this unit automatically sends the status information to the host.



Handshake flow charts for status command

- The commands used for sending status information are the same as the status information commands used for ②.  
For “Status request and status information code table” – “Status information command and Status command” ([page 102](#)).

## Control command code table

CATEGORY	CONTENTS		COMMAND	PARAMETER	CODE	REMARKS		
POWER	POWER ON		PW	ON	PWON<CR>	Only available for operation with IP control		
	STANDBY			STANDBY	PWSTANDBY<CR>			
MASTER VOLUME	UP		MV	UP	MVUP<CR>			
	DOWN			DOWN	MVDOWN<CR>			
	00 – 99			**	MV**<CR>	** :00 to 99 by ASCII, 80=0dB, 99=---(MIN)		
CHANNEL VOLUME	FRONT Lch	UP	CV	FL UP	CVFL UP<CR>			
		DOWN		FL DOWN	CVFL DOWN<CR>			
		Direct change to **dB		FL **	CVFL **<CR>	** :38 to 62 by ASCII, 50=0dB		
	FRONT Rch	UP		FR UP	CVFR UP<CR>			
		DOWN		FR DOWN	CVFR DOWN<CR>			
		Direct change to **dB		FR **	CVFR **<CR>	** :38 to 62 by ASCII, 50=0dB		
	CENTERch	UP		C UP	CVC UP<CR>			
		DOWN		C DOWN	CVC DOWN<CR>			
		Direct change to **dB		C **	CVC **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SUBWOOFER(1)ch	UP		SW UP	CVSW UP<CR>			
		DOWN		SW DOWN	CVSW DOWN<CR>			
		Direct change to **dB		SW **	CVSW **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SURROUND Lch	UP		SL UP	CVSL UP<CR>			
		DOWN		SL DOWN	CVSL DOWN<CR>			
		Direct change to **dB		SL **	CVSL **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SURROUND Rch	UP		SR UP	CVSR UP<CR>			
		DOWN		SR DOWN	CVSR DOWN<CR>			
		Direct change to **dB		SR **	CVSR **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SURROUND BACK Lch (SBch 2SP)	UP		SBL UP	CVSBL UP<CR>			
		DOWN		SBL DOWN	CVSBL DOWN<CR>			
		Direct change to **dB		SBL **	CVSBL **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SURROUND BACK Rch (SBch 2SP)	UP		SBR UP	CVSBR UP<CR>			
		DOWN		SBR DOWN	CVSBR DOWN<CR>			
		Direct change to **dB		SBR **	CVSBR **<CR>	** :38 to 62 by ASCII, 50=0dB		
	SURROUND BACK ch (SBch 1SP)	UP		SB UP	CVSB UP<CR>			
		DOWN		SB DOWN	CVSB DOWN<CR>			
		Direct change to **dB		SB **	CVSB **<CR>	** :38 to 62 by ASCII, 50=0dB		
	FRONT HEIGHT Lch	UP		FHL UP	CVFHL UP<CR>			
		DOWN		FHL DOWN	CVFHL DOWN<CR>			
		Direct change to **dB		FHL **	CVFHL **	** :38 to 62 by ASCII, 50=0dB		
	FRONT HEIGHT Rch	UP		FHR UP	CVFHR UP<CR>			
		DOWN		FHR DOWN	CVFHR DOWN<CR>			
		Direct change to **dB		FHR **	CVFHR **	** :38 to 62 by ASCII, 50=0dB		
	OUTPUT MUTE	ON		MU	ON	MUON<CR>		
		OFF			OFF	MUOFF<CR>		

CATEGORY	CONTENTS	COMMAND	PARAMETER	CODE	REMARKS
Select INPUT source	CD	SI	CD	SICD<CR>	
	DVD		DVD	SIDVD<CR>	
	BD		BD	SIBD<CR>	
	TV		TV	SITV<CR>	
	SAT/CBL		SAT/CBL	SISAT/CBL<CR>	
	GAME		GAME	SIGAME<CR>	
	GAME2		GAME2	SIGAME2<CR>	
	DOCK		DOCK	SIDOCK<CR>	
	V.AUX		V.AUX	SIV.AUX<CR>	
	iPOD		IPOD	SIIPOD<CR>	• In the input source which iPod is assigned, the response of "SIIPOD" is returned.
	NET/USB		NET/USB	SINET/USB<CR>	
	SERVER		SERVER	SISERVER<CR>	
	FAVORITES		FAVORITES	SIFAVORITES<CR>	
	USB/IPOD		USB/IPOD	SIUSB/IPOD<CR>	
USB	USB	SIUSB<CR>			
IPD	IPD	SIIPD<CR>			
MAIN-ZONE	ON	ZM	ON	ZMON<CR>	
	OFF		OFF	ZMOFF<CR>	
SD Status	Set AUTO mode (Priority:HDMI>>DIGITAL>>ANALOG)	SD	AUTO	SDAUTO<CR>	
	Set force HDMI INPUT mode		HDMI	SDHDMI<CR>	
	Set force DIGITAL INPUT (Optical, Coaxial) mode		DIGITAL	SDDIGITAL<CR>	
	Set force ANALOG INPUT mode		ANALOG	SDANALOG<CR>	
DIGITAL INPUT MODE	Set DIGITAL INPUT AUTO mode	DC	AUTO	DCAUTO<CR>	
	Set DIGITAL INPUT force PCM mode		PCM	DCPCM<CR>	
	Set DIGITAL INPUT force DTS mode		DTS	DCDTS<CR>	
VIDEO SELECT mode	DVD	SV	DVD	SVDVD<CR>	
	BD		BD	SVBD<CR>	
	TV		TV	SVTV<CR>	
	SAT/CBL		SAT/CBL	SVSAT/CBL<CR>	
	GAME		GAME	SVGAME<CR>	
	GAME2		GAME2	SVGAME2<CR>	
	DOCK		DOCK	SVDOCK<CR>	
	V.AUX		V.AUX	SVV.AUX<CR>	
	VIDEO SELECT mode cancel		SOURCE	SVSOURCE<CR>	
MAIN ZONE SLEEP TIMER	MAIN ZONE SLEEP TIMER setting	SLP	OFF	SLPOFF<CR>	
	Set to sleep timer		***	SLP***<CR>	***:001 to 120 by ASCII, 010=10min

CATEGORY	CONTENTS	COMMAND	PARAMETER	CODE	REMARKS
Select SURROUND mode	MOVIE	MS	MOVIE	MSMOVIE<CR>	
	MUSIC		MUSIC	MSMUSIC<CR>	
	GAME		GAME	MSGAME<CR>	
	DIRECT		DIRECT	MSDIRECT<CR>	
	PURE DIRECT		PURE DIRECT	MSPURE DIRECT<CR>	
	STEREO		STEREO	MSSTEREO<CR>	
	STANDARD		STANDARD	MSSTANDARD<CR>	
	DOLBY DIGITAL		DOLBY DIGITAL	MSDOLBY DIGITAL<CR>	
	DTS SURROUND		DTS SURROUND	MSDTS SURROUND<CR>	
	MCH STEREO		MCH STEREO	MSMCH STEREO<CR>	
	ROCK ARENA		ROCK ARENA	MSROCK ARENA<CR>	
	JAZZ CLUB		JAZZ CLUB	MSJAZZ CLUB<CR>	
	CLASSIC CONCERT		CLASSIC CONCERT	MSCLASSIC CONCERT<CR>	
	MONO MOVIE		MONO MOVIE	MSMONO MOVIE<CR>	
	MATRIX		MATRIX	MSMATRIX<CR>	
VIDEO GAME	VIDEO GAME	MSVIDEO GAME<CR>			
VIRTUAL	VIRTUAL	MSVIRTUAL<CR>			
Quick Select1-4 Mode	QUICK1		QUICK1	MSQUICK1<CR>	
	QUICK2		QUICK2	MSQUICK2<CR>	
	QUICK3		QUICK3	MSQUICK3<CR>	
	QUICK4		QUICK4	MSQUICK4<CR>	
Quick Select1-4 Mode Memory	QUICK1 MEMORY		QUICK1 MEMORY	MSQUICK1 MEMORY<CR>	
	QUICK2 MEMORY		QUICK2 MEMORY	MSQUICK2 MEMORY<CR>	
	QUICK3 MEMORY		QUICK3 MEMORY	MSQUICK3 MEMORY<CR>	
	QUICK4 MEMORY		QUICK4 MEMORY	MSQUICK4 MEMORY<CR>	
Select Video Mode	Set HDMI AUDIO Output to AMP	VS	AUDIO AMP	VSAUDIO AMP<CR>	
	Set HDMI AUDIO Output to TV		AUDIO TV	VSAUDIO TV<CR>	
	Set Video Processing Mode to AUTO		VPMAUTO	VSVPMAUTO<CR>	
	Set Video Processing Mode to GAME		VPMGAME	VSVPMGAME<CR>	
	Set Video Processing Mode to MOVIE		VPMMOVI	VSVPMMOVI<CR>	

CATEGORY	CONTENTS		COMMAND	PARAMETER	CODE	REMARKS
PARAMETER setting	TONE CONTROL	ON	PS	TONE CTRL ON	PSTONE CTRL ON<CR>	
		OFF		TONE CTRL OFF	PSTONE CTRL OFF<CR>	
	SURROUND BACK SP MODE set	SB:MTRX ON		SB:MTRX ON	PSSB:MTRX ON<CR>	
		SB:PLIIX CINEMA		SB:PLIIX CINEMA	PSSB:PLIIX CINEMA<CR>	
		SB:PLIIX MUSIC		SB:PLIIX MUSIC	PSSB:PLIIX MUSIC<CR>	
		SB:ON		SB:ON	PSSB:ON<CR>	
		SB:OFF		SB:OFF	PSSB:OFF<CR>	
	CINEMA EQ	ON		CINEMA EQ.ON	PSHTEQ ON<CR>	
		OFF		CINEMA EQ.OFF	PSHTEQ OFF<CR>	
	MODE	MUSIC		MODE:MUSIC	PSMODE:MUSIC<CR>	CINEMA / MUSIC / GAME / PL mode change (This parameter can change DOLBY PLII, PLIIX, NEO:6 mode.) --- SB=ON:PLIIX mode / SB=OFF:PLII mode --- GAME can change DOLBY PLII & PLIIX mode --- PL can change ONLY DOLBY PLII mode
		CINEMA		MODE:CINEMA	PSMODE:CINEMA<CR>	
		GAME		MODE:GAME	PSMODE:GAME<CR>	
		PRO LOGIC		MODE:PRO LOGIC	PSMODE:PRO LOGIC<CR>	
	FRONT HEIGHT (PLIIZ Height) Output	ON		FH:ON	PSFH:ON<CR>	
		OFF		FH:OFF	PSFH:OFF<CR>	
	PLIIZ HEIGHT GAIN direct change	LOW		PHG LOW	PSPHG LOW<CR>	
		MID		PHG MID	PSPHG MID<CR>	
		HIGH		PHG HI	PSPHG HI<CR>	
	BASS	UP		BAS UP	PSBAS UP<CR>	
		DOWN		BAS DOWN	PSBAS DOWN<CR>	
		Direct change to **dB		BAS **	PSBAS 50<CR>	** :00 to 99 by ASCII, 50=0dB (from -6 to +6 (44 to 56))
	TREBLE	UP		TRE UP	PSTRE UP<CR>	
		DOWN		TRE DOWN	PSTRE DOWN<CR>	
		Direct change to **dB		TRE **	PSTRE 50<CR>	** :00 to 99 by ASCII, 50=0dB (from -6 to +6 (44 to 56))
	DRC direct change	AUTO		DRC AUTO	PSDRC AUTO<CR>	
		LOW		DRC LOW	PSDRC LOW<CR>	
		MID		DRC MID	PSDRC MID<CR>	
		HIGH		DRC HI	PSDRC HI<CR>	
		OFF		DRC OFF	PSDRC OFF<CR>	
	D.COMP direct change	OFF		DCO OFF	PSDCO OFF<CR>	
		LOW		DCO LOW	PSDCO LOW<CR>	
		MID		DCO MID	PSDCO MID<CR>	
		HIGH		DCO HIGH	PSDCO HIGH<CR>	
LFE	UP	LFE UP	PSLEE UP<CR>			
	DOWN	LFE DOWN	PSLFE DOWN<CR>			
	Direct change to **dB	LFE **	PSLFE 10<CR>	** :00 to 99 by ASCII, 00=0dB, 10=-10dB (from 0 to -10)		
EFFECT LEVEL	UP	EFF UP	PSEFF UP<CR>			
	DOWN	EFF DOWN	PSEFF DOWN<CR>			
	Direct change to **dB	EFF **	PSEFF **<CR>	** :00 to 99 by ASCII, 00=0dB, 10=10dB		

CATEGORY	CONTENTS		COMMAND	PARAMETER	CODE	REMARKS
PARAMETER setting	DELAY	UP	PS	DEL UP	PSDEL UP<CR>	
		DOWN		DEL DOWN	PSDEL DOWN<CR>	
		Direct change to **dB		DEL ***	PSDEL ***<CR>	***:000 to 999 by ASCII, 000=0ms, 300=300ms (from 0 to 300) 0-60ms:3ms/Step Over 60ms:10ms/Step
	AFDM	ON		AFD ON	PSAFD ON<CR>	
		OFF		AFD OFF	PSAFD OFF<CR>	
	PANORAMA	ON		PAN ON	PSPAN ON<CR>	
		OFF		PAN OFF	PSPAN OFF<CR>	
	DIMENSION	UP		DIM UP	PSDIM UP<CR>	
		DOWN		DIM DOWN	PSDIM DOWN<CR>	
		Direct change to **dB		DIM **	PSDIM **<CR>	** :00 to 99 by ASCII, 00=0, from 0 to 6
	CENTER WIDTH	UP		CEN UP	PSCEN UP<CR>	
		DOWN		CEN DOWN	PSCEN DOWN<CR>	
		Direct change to **dB		CEN **	PSCEN **<CR>	** :00 to 99 by ASCII, 00=0 (from 0 to 7)
	CENTER IMAGE	UP		CEI UP	PSCEI UP<CR>	
		DOWN		CEI DOWN	PSCEI DOWN<CR>	
		Direct change to **dB		CEI **	PSCEI **<CR>	** :00 to 99 by ASCII, 00=0.0 from 0.0 to 1.0
	SW	ON		SWR ON	PSSWR ON<CR>	
		OFF		SWR OFF	PSSWR OFF<CR>	
	ROOM SIZE direct change	S		RSZ S	PSRSZ S<CR>	
		MS		RSZ MS	PSRSZ MS<CR>	
		M		RSZ M	PSRSZ M<CR>	
		ML		RSZ ML	PSRSZ ML<CR>	
		L		RSZ L	PSRSZ L<CR>	
	AUDIO DELAY	UP		DELAY UP	PSDELAY UP<CR>	
		DOWN		DELAY DOWN	PSDELAY DOWN<CR>	
		Direct change to **dB		DELAY ***	PSDELAY ***<CR>	***:000 to 999 by ASCII, 000=0ms, 200=200ms from 0 to 200
	AUDIO RESTORER direct change	OFF		RSTR OFF	PSRSTR OFF<CR>	
MODE1		RSTR MODE1	PSRSTR MODE1<CR>			
MODE2		RSTR MODE2	PSRSTR MODE2<CR>			
MODE3		RSTR MODE3	PSRSTR MODE3<CR>			

CATEGORY	CONTENTS		COMMAND	PARAMETER	CODE	REMARKS
ZONE2 Control	ZONE2 mode set, and select source	CD	Z2	CD	Z2CD<CR>	
		DVD		DVD	Z2DVD<CR>	
		BD		BD	Z2BD<CR>	
		SAT/CBL		SAT/CBL	Z2SAT/CBL<CR>	
		DOCK		DOCK	Z2DOCK<CR>	
		V.AUX		V.AUX	Z2V.AUX<CR>	
		IPOD		IPOD	Z2IPOD<CR>	• In the input source which iPod is assigned, the response of "Z2IPOD" is returned.
		NET/USB		NET/USB	Z2NET/USB<CR>	
		SERVER		SERVER	Z2SERVER<CR>	
		FAVORITES		FAVORITES	Z2FAVORITES<CR>	
	USB/IPOD	USB/IPOD	Z2USB/IPOD<CR>			
	ZONE2 mode cancel			SOURCE	Z2SOURCE<CR>	
	Select INPUT source USB and USB Start Playback			USB	Z2USB<CR>	
	Select INPUT source USB and iPod DIRECT Start Playback			IPD	Z2IPD<CR>	
	Z2 QUICK SELECT 1-4 MODE SELECT	QUICK1		QUICK1	Z2QUICK1<CR>	
		QUICK2		QUICK2	Z2QUICK2<CR>	
		QUICK3		QUICK3	Z2QUICK3<CR>	
		QUICK4		QUICK4	Z2QUICK4<CR>	
	Z2 QUICK SELECT 1-5 MODE MEMORY	QUICK1 MEMORY		QUICK1 MEMORY	Z2QUICK1 MEMORY<CR>	
		QUICK2 MEMORY		QUICK2 MEMORY	Z2QUICK2 MEMORY<CR>	
		QUICK3 MEMORY		QUICK3 MEMORY	Z2QUICK3 MEMORY<CR>	
		QUICK4 MEMORY		QUICK4 MEMORY	Z2QUICK4 MEMORY<CR>	
	ZONE2 VOLUME	UP		UP	Z2UP<CR>	
		DOWN		DOWN	Z2DOWN<CR>	
		Direct change to **dB		**	Z2**<CR>	** :00 to 99 by ASCII, 80=0dB, 99=---(MIN) 00=-80dB
	ZONE2 ON/OFF change	ON		ON	Z2ON<CR>	
		OFF		OFF	Z2OFF<CR>	
	ZONE2 MUTE ON/OFF	ON	Z2MU	ON	Z2MUON<CR>	
		OFF		OFF	Z2MUOFF<CR>	
	ZONE2 CHANNEL VOLUME FRONT Lch	UP	Z2CV	FL UP	Z2CVFL UP<CR>	
		DOWN		FL DOWN	Z2CVFL DOWN<CR>	
		Direct change to **dB		FL **	Z2CVFL **<CR>	** :38 to 62 by ASCII, 50=0dB
	ZONE2 CHANNEL VOLUME FRONT Rch	UP	Z2CV	FR UP	Z2CVFR UP<CR>	
DOWN		FR DOWN		Z2CVFR DOWN<CR>		
Direct change to **dB		FR **		Z2CVFR **<CR>	** :38 to 62 by ASCII, 50=0dB	
ZONE2 SLEEP TIMER setting	OFF	Z2SLP	OFF	Z2SLPOFF<CR>		
Direct change to ***min			***	Z2SLP***<CR>	*** :001 to 120 by ASCII, 010=10min	



CATEGORY	CONTENTS	COMMAND	PARAMETER	CODE	REMARKS	
NET/USB Control	"Cursor Up" Control	NS	90	NS90<CR>		
	"Cursor Down" Control		91	NS91<CR>		
	"Cursor Left" Control		92	NS92<CR>		
	"Cursor Right" Control		93	NS93<CR>		
	"Enter (Play/Pause)" Control		94	NS94<CR>		
	"Play" Control		9A	NS9A<CR>		
	"Pause" Control		9B	NS9B<CR>		
	"Stop" Control		9C	NS9C<CR>		
	"Skip Plus" Control		9D	NS9D<CR>		
	"Skip Minus" Control		9E	NS9E<CR>		
	"Repeat One" (Media Server, USB, iPod Direct)		9H	NS9H<CR>		
	"Repeat All" (Media Server, USB, iPod Direct)		9I	NS9I<CR>		
	"Repeat Off" (Media Server, USB, iPod Direct)		9J	NS9J<CR>		
	"Random On" (Media Server, USB) "Shuffle Songs" Control (iPod Direct Only)		9K	NS9K<CR>		
	"Random Off" (Media Server, USB) "Shuffle Off" Control (iPod Direct)		9M	NS9M<CR>		
	Toggle Switch "Browse Mode/Remote Mode" Control (iPod Direct only)		9W	NS9W<CR>		
	"Page Next" Control		9X	NS9X<CR>		
	"Page Previous" Control		9Y	NS9Y<CR>		
	Net Audio Preset Name status (UTF-8)			H	NSH<CR>	NSH<CR> (Return) NSH00***** (20 digits)<CR>(Preset Name : A1) NSH01***** (20 digits)<CR>(Preset Name : A2) - NSH54***** (20 digits)<CR>(Preset Name : G7) NSH55***** (20 digits)<CR>(Preset Name : G8)
	Add Favorites folder			FV MEM	NSFV MEM<CR>	
Favorites1 Memory		P1 MEM	NSP1 MEM<CR>			
Favorites2 Memory		P2 MEM	NSP2 MEM<CR>			
Favorites3 Memory		P3 MEM	NSP3 MEM<CR>			

CATEGORY	CONTENTS	COMMAND	PARAMETER	CODE	REMARKS
DOCK Control	"Cursor Up" Control	IP	90	IP90<CR>	
	"Cursor Down" Control		91	IP91<CR>	
	"Cursor Left" Control		92	IP92<CR>	
	"Cursor Right" Control		93	IP93<CR>	
	"Enter (Play/Pause)" Control		94	IP94<CR>	
	"Play/Pause" Control		9A	IP9A<CR>	
	"Stop" Control		9C	IP9C<CR>	
	"Skip Plus" Control		9D	IP9D<CR>	
	"Skip Minus" Control		9E	IP9E<CR>	
	"Manual Search Plus" Control (ASD-1R/11R/3/51)		9F	IP9F<CR>	
	"Manual Search Minus" Control (ASD-1R/11R/3/51)		9G	IP9G<CR>	
	"Repeat One" Control (ASD-1R/11R/3/51)		9H	IP9H<CR>	
	"Repeat All" Control (ASD-1R/11R/3/51)		9I	IP9I<CR>	
	"Repeat Off" Control (ASD-1R/11R/3/51)		9J	IP9J<CR>	
	"Shuffle Songs" Control (ASD-1R/11R Only)		9K	IP9K<CR>	
	"Shuffle Album" Control (ASD-1R/11R Only)		9L	IP9L<CR>	
	"Shuffle Off" Control (ASD-1R/11R/3/51)		9M	IP9M<CR>	
	"MENU" Control		9N	IP9N<CR>	
	Switch the "Browse Mode" Control (ASD-1R/11R Only)		9P	IP9P<CR>	
	Switch the "Remote Mode" Control (ASD-1R/11R Only)		9Q	IP9Q<CR>	
"Page Next" Control	9X	IP9X<CR>			
"Page Previous" Control	9Y	IP9Y<CR>			

CATEGORY	CONTENTS	COMMAND	PARAMETER	CODE	REMARKS	
System Control	"Cursor Up" Control	MN	CUP	MNCUP<CR>		
	"Cursor Down" Control		CDN	MNCDN<CR>		
	"Cursor Left" Control		CLT	MNCLT<CR>		
	"Cursor Right" Control		CRT	MNCRT<CR>		
	"Enter" Control		ENT	MNENT<CR>		
	"RETURN" Control		RTN	MNRTN<CR>		
	GUI Menu		ON	MEN ON	MNMEN ON<CR>	
			OFF	MEN OFF	MNMEN OFF<CR>	
	GUI Source Select Menu		ON	SRC ON	MNSRC ON<CR>	
			OFF	SRC OFF	MNSRC OFF<CR>	
	REMOTE CONTROL LOCK ON/OFF	ON	REMOTE LOCK ON	SYREMOTE LOCK ON<CR>		
		OFF	REMOTE LOCK OFF	SYREMOTE LOCK OFF<CR>		
	PANEL BUTTON (Except MASTER VOL.) CONTROL LOCK ON	SY	PANEL LOCK ON	SY PANEL LOCK ON<CR>		
	PANEL BUTTON & MASTER VOL. CONTROL LOCK ON		PANEL+V LOCK ON	SY PANEL+V LOCK ON<CR>		
	PANEL BUTTON & MASTER VOL. CONTROL LOCK OFF		PANEL LOCK OFF	SY PANEL LOCK OFF<CR>		
	ID Number for UPGRADE is displayed on FL Display *****:12-digit ID Number	UG	IDN	IDN<CR>	UGIDN *****<CR> UGIDN NG<CR>	
	REMOTE MAINTENANCE Mode Start	RM	STA	RM STA<CR>		
	REMOTE MAINTENANCE Mode End		END	RM END<CR>		
	AUTO LIP SYNC=DISABLE	SS	HOSALS ON<CR>	SSHOSALS ON<CR>		
	AUTO LIP SYNC=ENABLE		HOSALS OFF<CR>	SSHOSALS OFF<CR>		
Screen Saver Off	OSDSCR ON<CR>		SSOSDSCR ON<CR>			
Screen Saver On	OSDSCR OFF<CR>		SSOSDSCR OFF<CR>			

## Status request and status information code table

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)			REMARKS	
Request.	Command	CONTENTS		Command		
POWER	PW Status	PW?<CR>	POWER ON		Only available for operation with IP control	
			STANDBY			
MASTER VOLUME		MV?<CR>	**dB		** :00 to 99 by ASCII, 80=0dB, 99=--(MIN)	
CHANNEL VOLUME		CV?<CR>	FRONT Lch	Direct change to **dB	CVFL **<CR>	** :38 to 62 by ASCII, 50=0dB
			FRONT Rch	Direct change to **dB	CVFR **<CR>	** :38 to 62 by ASCII, 50=0dB
			CENTERch	Direct change to **dB	CVC **<CR>	** :38 to 62 by ASCII, 50=0dB
			SUBWOOFER(1)ch	Direct change to **dB	CVSW **<CR>	** :38 to 62 by ASCII, 50=0dB
			SURROUND Lch	Direct change to **dB	CVSL **<CR>	** :38 to 62 by ASCII, 50=0dB
			SURROUND Rch	Direct change to **dB	CVSR **<CR>	** :38 to 62 by ASCII, 50=0dB
			SURROUND BACK Lch (SBch 2SP)	Direct change to **dB	CVSBL **<CR>	** :38 to 62 by ASCII, 50=0dB
			SURROUND BACK Rch (SBch 2SP)	Direct change to **dB	CVSBR **<CR>	** :38 to 62 by ASCII, 50=0dB
			SURROUND BACK ch (SBch 1SP)	Direct change to **dB	CVSB **<CR>	** :38 to 62 by ASCII, 50=0dB
			FRONT HEIGHT Lch	Direct change to **dB	CVFHL **	** :38 to 62 by ASCII, 50=0dB
			FRONT HEIGHT Rch	Direct change to **dB	CVFHR **	** :38 to 62 by ASCII, 50=0dB
OUTPUT MUTE		MU?<CR>	ON		MUON<CR>	
			OFF		MUOFF<CR>	

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS
Request.	Command	CONTENTS	Command	
Select INPUT source	SI?<CR>	CD	SICD<CR>	
		DVD	SIDVD<CR>	
		BD	SIBD<CR>	
		TV	SITV<CR>	
		SAT/CBL	SISAT/CBL<CR>	
		GAME	SIGAME<CR>	
		GAME2	SIGAME2<CR>	
		DOCK	SIDOCK<CR>	
		V.AUX	SIV.AUX<CR>	
		iPOD	SIIPOD<CR>	• In the input source which iPod is assigned, the response of "SIIPOD" is returned.
		NET/USB	SINET/USB<CR>	
		SERVER	SISERVER<CR>	
		FAVORITES	SIFAVORITES<CR>	
		USB/IPOD	SIUSB/IPOD<CR>	
USB	SIUSB<CR>			
IPD	SIIPD<CR>			
MAIN-ZONE	ZM?<CR>	ON	ZMON<CR>	
		OFF	ZMOFF<CR>	
SD Status	SD?<CR>	Set AUTO mode (Priority:HDMI>>DIGITAL>>ANALOG)	SDAUTO<CR>	
		Set force HDMI INPUT mode	SDHDMI<CR>	
		Set force DIGITAL INPUT (Optical, Coaxial) mode	SDDIGITAL<CR>	
		Set force ANALOG INPUT mode	SDANALOG<CR>	
DIGITAL INPUT MODE	DC?<CR>	Set DIGITAL INPUT AUTO mode	DCAUTO<CR>	
		Set DIGITAL INPUT force PCM mode	DCPCM<CR>	
		Set DIGITAL INPUT force DTS mode	DCDTS<CR>	
VIDEO SELECT mode	SV?<CR>	DVD	SVDVD<CR>	
		BD	SVBD<CR>	
		TV	SVTV<CR>	
		SAT/CBL	SVSAT/CBL<CR>	
		GAME	SVGAME<CR>	
		GAME2	SVGAME2<CR>	
		DOCK	SVDOCK<CR>	
		V.AUX	SVV.AUX<CR>	
		VIDEO SELECT mode cancel	SVSOURCE<CR>	
MAIN ZONE SLEEP TIMER	SLP?<CR>	MAIN ZONE SLEEP TIMER setting	SLPOFF<CR>	
		set to sleep timer	SLP***<CR>	***:001 to 120 by ASCII, 010=10min

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS
Request.	Command	CONTENTS	Command	
Select SURROUND mode	MS?<CR>	MOVIE	MSMOVIE<CR>	
		MUSIC	MSMUSIC<CR>	
		GAME	MSGAME<CR>	
		DIRECT	MSDIRECT<CR>	
		PURE DIRECT	MSPURE DIRECT<CR>	
		STEREO	MSSTEREO<CR>	
		STANDARD	MSSTANDARD<CR>	
		DOLBY DIGITAL	MSDOLBY DIGITAL<CR>	
		DTS SURROUND	MSDTS SURROUND<CR>	
		MCH STEREO	MSMCH STEREO<CR>	
		ROCK ARENA	MSROCK ARENA<CR>	
		JAZZ CLUB	MSJAZZ CLUB<CR>	
		CLASSIC CONCERT	MSCCLASSIC CONCERT<CR>	
		MONO MOVIE	MSMONO MOVIE<CR>	
		MATRIX	MSMATRIX<CR>	
		VIDEO GAME	MSVIDEO GAME<CR>	
		VIRTUAL	MSVIRTUAL<CR>	
Quick Select Mode	MSQUICK ?<CR>	Not Select	MSQUICK0<CR>	
		QUICK1	MSQUICK1<CR>	
		QUICK2	MSQUICK2<CR>	
		QUICK3	MSQUICK3<CR>	
		QUICK4	MSQUICK4<CR>	
Select Video Mode	VSAUDIO ?<CR>	Set HDMI AUDIO Output to AMP	VSAUDIO AMP<CR>	
		Set HDMI AUDIO Output to TV	VSAUDIO TV<CR>	
		Return VSAUDIO Status	VSAUDIO ?<CR>	
	VSVPN ?<CR>	Set Video Processing Mode to AUTO	VSVPMAUTO<CR>	
		Set Video Processing Mode to GAME	VSVPMGAME<CR>	
		Set Video Processing Mode to MOVIE	VSVPMMOVI<CR>	

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS	
Request.	Command	CONTENTS	Command		
PARAMETER setting	TONE CONTROL	PSTONE CTRL ?<CR>	ON	PSTONE CTRL ON<CR>	
			OFF	PSTONE CTRL OFF<CR>	
	SURROUND BACK SP MODE set	PSSB: ?<CR>	SB:MTRX ON	PSSB:MTRX ON<CR>	
			SB:PLIIX CINEMA	PSSB:PLIIX CINEMA<CR>	
			SB:PLIIX MUSIC	PSSB:PLIIX MUSIC<CR>	
			SB:ON	PSSB:ON<CR>	
			SB:OFF	PSSB:OFF<CR>	
			SB:ESDSCRT	PSSB:ESDSCRT<CR>	
			SB:ESMTRX	PSSB:ESMTRX<CR>	
			SB:DSCRT ON	PSSB:DSCRT ON<CR>	
	CINEMA EQ	PSCINEMA EQ. ?<CR>	ON	PSHTEQ ON<CR>	
			OFF	PSHTEQ OFF<CR>	
	MODE	PSMODE: ?<CR>	MUSIC	PSMODE:MUSIC<CR>	CINEMA / MUSIC / GAME / PL mode change (This parameter can change DOLBY PLII, PLIIX, NEO:6 mode.) --- SB=ON:PLIIX mode / SB=OFF:PLII mode --- GAME can change DOLBY PLII & PLIIX mode --- PL can change ONLY DOLBY PLII mode
			CINEMA	PSMODE:CINEMA<CR>	
			GAME	PSMODE:GAME<CR>	
			PRO LOGIC	PSMODE:PRO LOGIC<CR>	
	FRONT HEIGHT (PLIIZ Height) Output	PSFH: ?<CR>	ON	PSFH:ON<CR>	
			OFF	PSFH:OFF<CR>	
	PLIIZ HEIGHT GAIN direct change	PSPHG ?<CR>	LOW	PSPHG LOW<CR>	
			MID	PSPHG MID<CR>	
			HIGH	PSPHG HI<CR>	
	BASS	PSBAS ?<CR>	Direct change to **dB	PSBAS **<CR>	** :00 to 99 by ASCII, 50=0dB (from -6 to +6 (44 to 56))
	TREBLE	PSTRE ?<CR>	Direct change to **dB	PSTRE **<CR>	** :00 to 99 by ASCII, 50=0dB (from -6 to +6 (44 to 56))
	DRC direct change	PSDRC ?<CR>	AUTO	PSDRC AUTO<CR>	
LOW			PSDRC LOW<CR>		
MID			PSDRC MID<CR>		
HIGH			PSDRC HI<CR>		
OFF			PSDRC OFF<CR>		
D.COMP direct change	PSDCO ?<CR>	OFF	PSDCO OFF<CR>		
		LOW	PSDCO LOW<CR>		
		MID	PSDCO MID<CR>		
		HIGH	PSDCO HIGH<CR>		
LFE	PSLFE ?<CR>	Direct change to **dB	PSLFE **<CR>	** :00 to 99 by ASCII, 00=0dB, 10=-10dB (from 0 to -10)	
EFFECT LEVEL	PSEFF ?<CR>	Direct change to **dB	PSEFF **<CR>	** :00 to 99 by ASCII, 00=0dB, 10=10dB	
DELAY	PSDEL ?<CR>	Direct change to **dB	PSDEL ***<CR>	*** :000 to 999 by ASCII, 000=0ms, 300=300ms (from 0 to 300) 0-60ms:3ms/Step Over 60ms:10ms/Step	

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS	
Request.	Command	CONTENTS	Command		
PARAMETER setting	AFDM	PSAFD ?<CR>	ON	PSAFD ON<CR>	
			OFF	PSAFD OFF<CR>	
	PANORAMA	PSPAN ?<CR>	ON	PSPAN ON<CR>	
			OFF	PSPAN OFF<CR>	
	DIMENSION	PSDIM ?<CR>	Direct change to **dB	PSDIM **<CR>	** :00 to 99 by ASCII, 00=0, from 0 to 6
	CENTER WIDTH	PSCEN ?<CR>	Direct change to **dB	PSCEN **<CR>	** :00 to 99 by ASCII, 00=0 (from 0 to 7)
	CENTER IMAGE	PSCEI ?<CR>	Direct change to **dB	PSCEI **<CR>	** :00 to 99 by ASCII, 00=0.0 from 0.0 to 1.0
	SW	PSSWR ?<CR>	ON	PSSWR ON<CR>	
			OFF	PSSWR OFF<CR>	
	ROOM SIZE direct change	PSRSZ ?<CR>	S	PSRSZ S<CR>	
			MS	PSRSZ MS<CR>	
			M	PSRSZ M<CR>	
			ML	PSRSZ ML<CR>	
			L	PSRSZ L<CR>	
	AUDIO DELAY	PSDELAY ?<CR>	Direct change to **dB	PSDELAY ***<CR>	*** :000 to 999 by ASCII, 000=0ms, 200=200ms from 0 to 200
AUDIO RESTORER direct change	PSRSTR ?<CR>	OFF	PSRSTR OFF<CR>		
		MODE1	PSRSTR MODE1<CR>		
		MODE2	PSRSTR MODE2<CR>		
		MODE3	PSRSTR MODE3<CR>		



Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS	
Request.	Command	CONTENTS	Command		
ZONE2 Control	Status	Z2?<CR>	CD	Z2CD<CR>	
			DVD	Z2DVD<CR>	
			BD	Z2BD<CR>	
			SAT/CBL	Z2SAT/CBL<CR>	
			DOCK	Z2DOCK<CR>	
			V.AUX	Z2V.AUX<CR>	
			IPOD	Z2IPOD<CR>	※In the input source which iPod is assigned, the response of "Z2IPOD" is returned.
			NET/USB	Z2NET/USB<CR>	
			SERVER	Z2SERVER<CR>	
			FAVORITES	Z2FAVORITES<CR>	
			USB/IPOD	Z2USB/IPOD<CR>	
	ZONE2 mode cancel	Z2SOURCE<CR>			
	ZONE2 VOLUME	Direct change to **dB	Z2**<CR>	** :00 to 99 by ASCII, 80=0dB, 99=---(MIN) 00=-80dB	
	ZONE2 ON/OFF change	ON	Z2ON<CR>		
		OFF	Z2OFF<CR>		
		Select INPUT source USB and USB Start Playback	Z2USB<CR>		
		Select INPUT source USB and iPod DIRECT Start Playback	Z2IPD<CR>		
Z2 OUTPUT MUTE	Z2MU?<CR>	ON	Z2MUON<CR>		
		OFF	Z2MUOFF<CR>		
Z2 QUICK SELECT 1-5 MODE MEMORY	Z2QUICK ?<CR>	QUICK1	Z2QUICK1<CR>		
		QUICK2	Z2QUICK2<CR>		
		QUICK3	Z2QUICK3<CR>		
		QUICK4	Z2QUICK4<CR>		
ZONE2 CHANNEL VOLUME	Z2CV?<CR>	FRONT Lch Direct change to **dB	Z2CVFL **<CR>	** :38 to 62 by ASCII, 50=0dB	
		FRONT Rch Direct change to **dB	Z2CVFR **<CR>	** :38 to 62 by ASCII, 50=0dB	
ZONE2 SLEEP TIMER setting	Z2SLP?<CR>	OFF	Z2SLPOFF<CR>		
		Direct change to ***min	Z2SLP***<CR>	***:001 to 120 by ASCII, 010=10min	






Status request command (Host → This unit)		Status information command and Status command (This unit → Host)		REMARKS
Request.	Command	CONTENTS	Command	
Onscreen Display Info List	(ASCII)	NSA<CR>	NSA0<CR> (Return) NSA0***** ***_???(96byte)<CR> NSA1※(Flag1byte) *****_???(95byte)<CR> NSA2※(Flag1byte) *****_???(95byte)<CR> NSA3※(Flag1byte) *****_???(95byte)<CR> NSA4※(Flag1byte) *****_???(95byte)<CR> NSA5※(Flag1byte) *****_???(95byte)<CR> NSA6※(Flag1byte) *****_???(95byte)<CR> NSA7※(Flag1byte) *****_???(96byte)<CR> NSE8 [ 1/10 ]_????????(96byte)<CR>	(ASCII CODE Character) *ASCII Character (MAX96byte) _:Null ?: Don't Care (The character after Null should be disregarded) ※:Cursor&Playable Information Data(1byte) Bit1:Playable Music =1 Bit2:Directory Bit3:Don't Care Bit4:CURSOR SELECT=1 Bit7:Picture Bit5, 6, 8:Don't Care *****_???:MAX 96byte
	(UTF-8)	NSE<CR>	NSE0<CR> (Return) NSE0***** ***_???(96byte)<CR> NSE1※(Flag1byte) *****_???(95byte)<CR> NSE2※(Flag1byte) *****_???(95byte)<CR> NSE3※(Flag1byte) *****_???(95byte)<CR> NSE4※(Flag1byte) *****_???(95byte)<CR> NSE5※(Flag1byte) *****_???(95byte)<CR> NSE6※(Flag1byte) *****_???(95byte)<CR> NSE7※(Flag1byte) *****_???(96byte)<CR> NSE8 [ 1/10 ]_????????(96byte)<CR>	(UTF-8 CODE Character) *UTF-8 Character (MAX96byte) _:Null ?: Don't Care (The character after Null should be disregarded) ※:Cursor&Playable Information Data(1byte) Bit1:Playable Music =1 Bit2:Directory Bit3:Don't Care Bit4:CURSOR SELECT=1 Bit7:Picture Bit5, 6, 8:Don't Care *****_???:MAX 96byte

Status request command (Host → This unit)		Status information command and Status command (This unit → Host)			REMARKS
Request.	Command	CONTENTS	Command		
System Control	Remote Status	RM?<CR>	ON	RM ON<CR>	
			OFF	RM OFF<CR>	
	HOS (HDMI Setup) status	HOS ?<CR>	ON	SSHOSALS ON<CR>	
			OFF	SSHOSALS OFF<CR>	
	GUI setting status	OSD ?<CR>	Screen Saver On	SSOSDSCR ON<CR>	
			Screen Saver Off	SSOSDSCR OFF<CR>	

## Information

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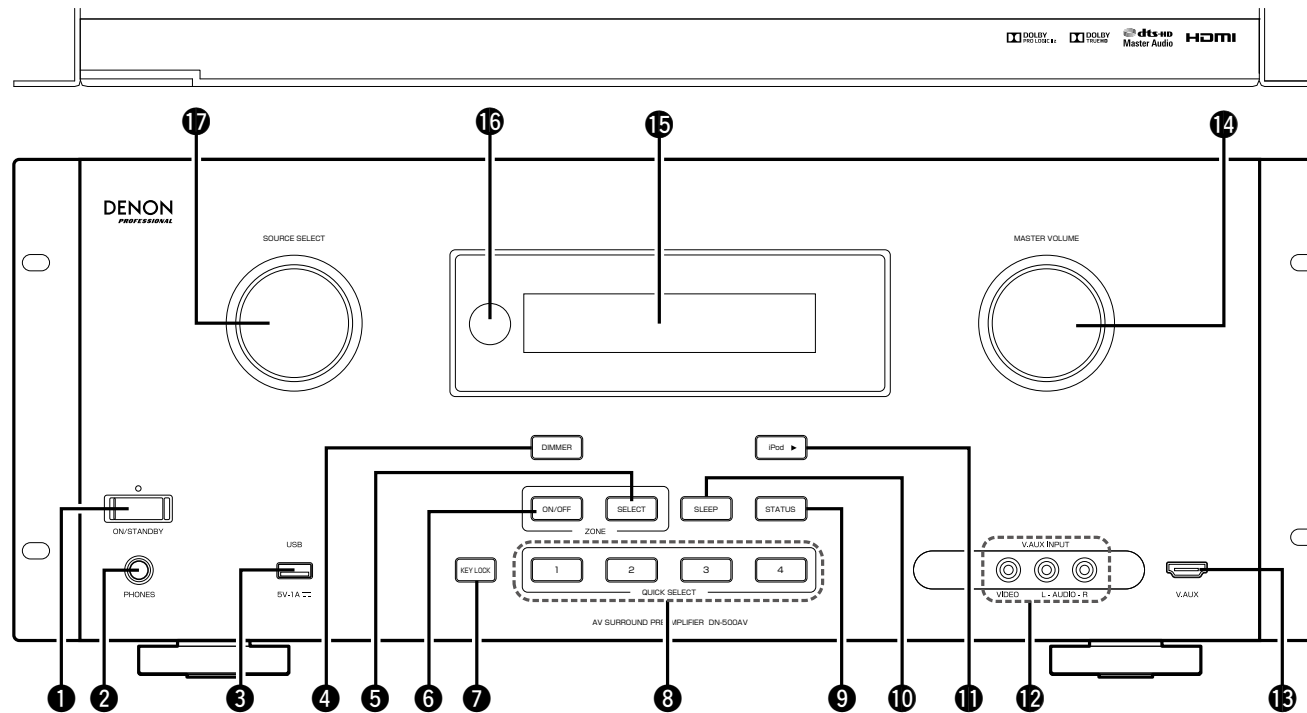
Here, we list various information related to this unit.  
Please refer to this information as needed.

- Part names and functions  [page 111](#)
- Other information  [page 116](#)
- Troubleshooting  [page 125](#)
- Specifications  [page 129](#)
- Index  [page 130](#)

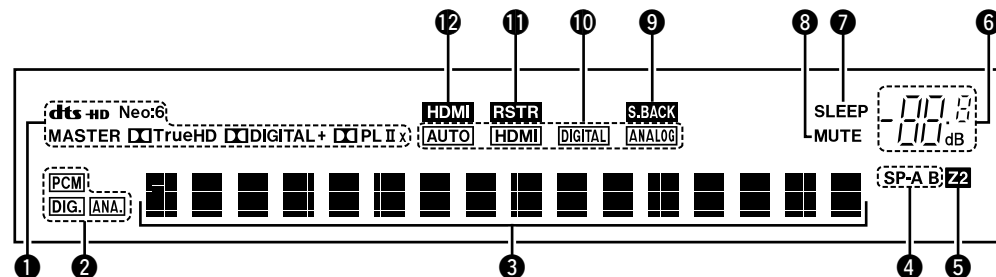
# Part names and functions

## Front panel

For buttons not explained here, see the page indicated in parentheses ( ).



- |  |  |   |
|--|--|---|
| <p><b>1 Power operation button (ON/STANDBY)</b> ..... (5)<br/>Turns power to this unit on and off (standby).</p> <p><b>2 Headphones jack (PHONES)</b></p> <p><b>NOTE</b><br/>To prevent hearing loss, do not raise the volume level excessively when using headphones.</p> <p><b>3 USB port</b> ..... (13)</p> <p><b>4 DIMMER button</b> ..... (74)</p> <p><b>5 ZONE2 SELECT button</b> ..... (52, 82)</p> | <p><b>6 ZONE2 ON/OFF button</b> ..... (52)</p> <p><b>7 KEY LOCK button</b> ..... (49)</p> <p><b>8 QUICK SELECT buttons</b> ..... (49, 53)</p> <p><b>9 STATUS button</b> ..... (63)</p> <p><b>10 SLEEP button</b> ..... (47, 53)</p> <p><b>11 iPod play button (iPod ►)</b> ..... (24)</p> <p><b>12 V.AUX INPUT connectors</b> ..... (12)</p> | <p><b>13 AUX-HDMI connector</b> ..... (8)</p> <p><b>14 MASTER VOLUME control knob</b> ..... (20)</p> <p><b>15 Display</b> ..... (112)</p> <p><b>16 Remote control sensor</b> ..... (115)</p> <p><b>17 SOURCE SELECT knob</b> ..... (19)</p> |
|--|--|---|



## 1 Decoder indicators

These light when the respective decoders are operating.

## 2 Input signal indicators

## 3 Information display

The input source name, surround mode, setting values and other information are displayed here.

## 4 Front speaker indicator

This lights according to the setting of the front A and B speakers.

## 5 Multi-zone indicators

This lights up when ZONE2 (separate room) power is turned on ([page 52](#)).

## 6 Master volume indicator

## 7 Sleep timer indicator

This lights when the sleep mode is selected ([page 47, 53](#)).

## 8 MUTE indicator

This lights when the mute mode is selected ([page 20](#)).

## 9 Surround back indicator

This lights when audio signals are being output from the surround back speakers ([page 65](#)).

## 10 Input mode indicators

Set the audio input modes for the different input sources ([page 80](#)).

## 11 RESTORER indicator

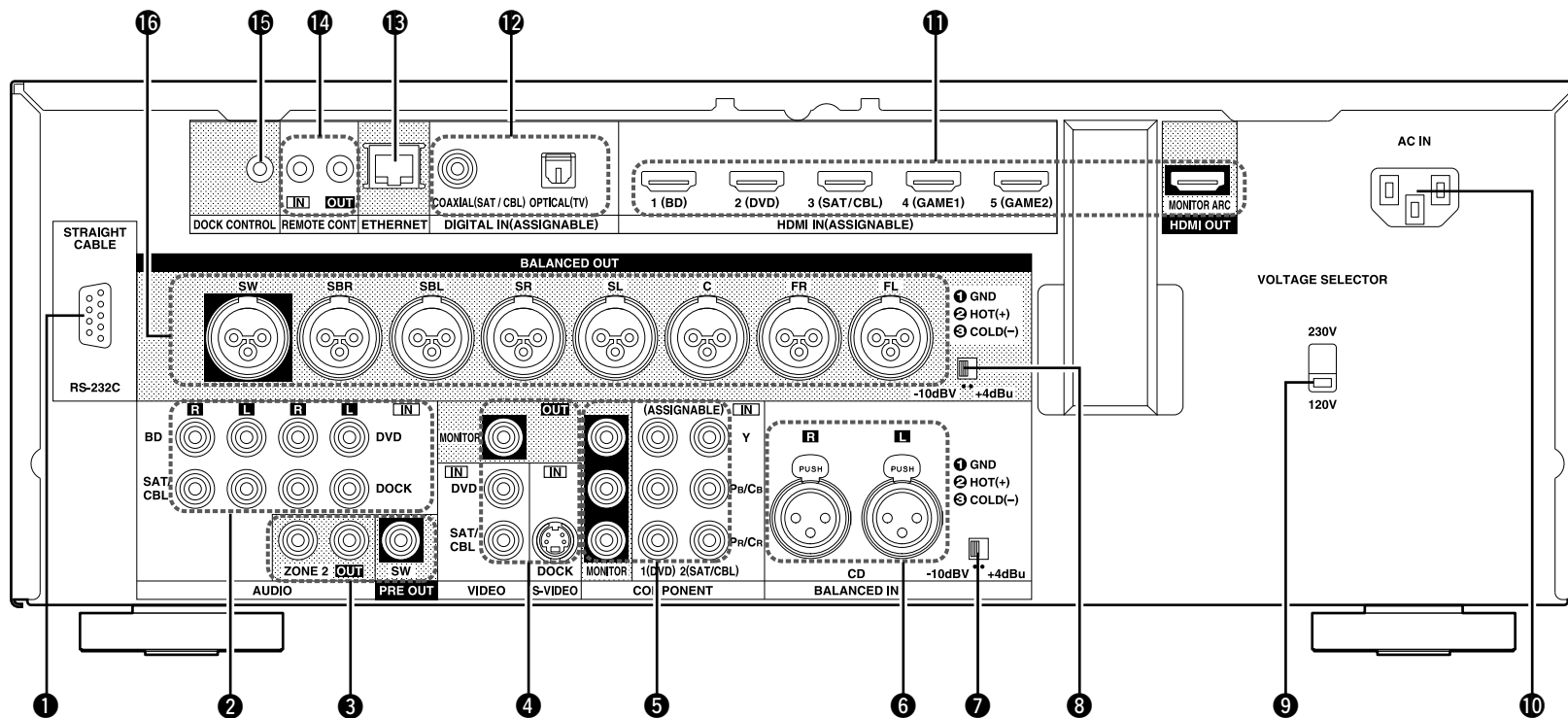
This lights when the RESTORER mode is selected ([page 62](#)).

## 12 HDMI indicator

This lights when playing using HDMI connections.

# Rear panel

See the page indicated in parentheses ( ).



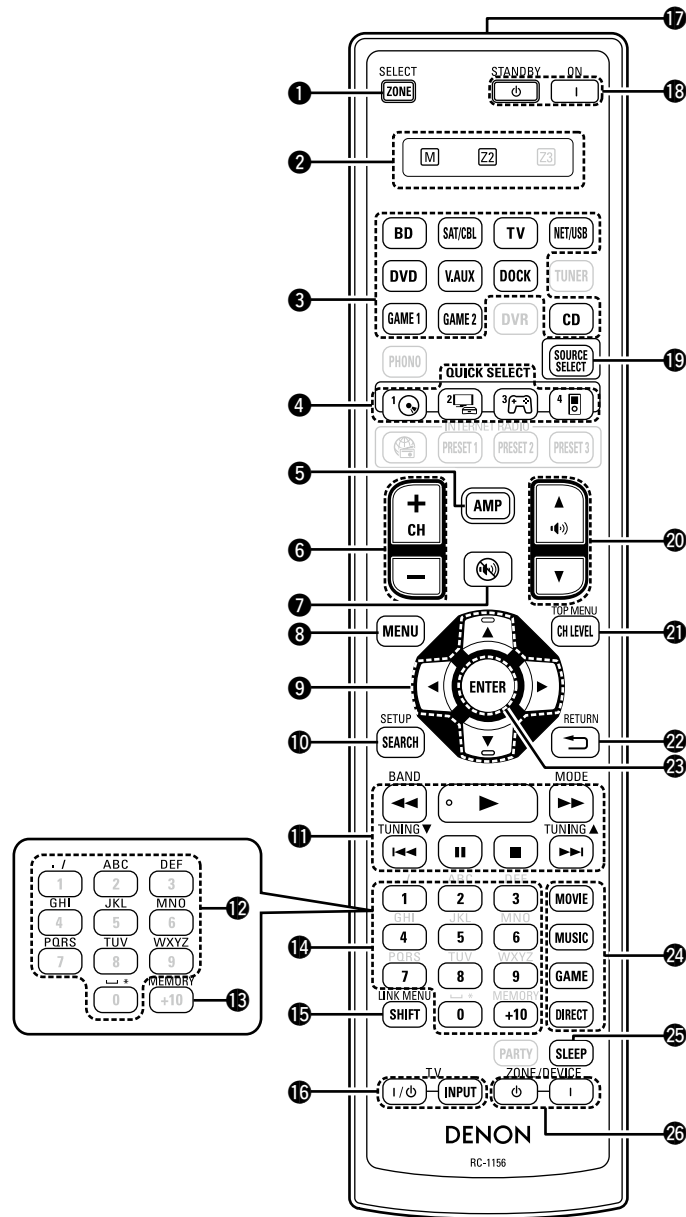
- |   |  |
|---|--|
| ① RS-232C connector..... (16, 89)             | ⑨ Voltage selector..... (17)             |
| ② Analog audio connectors..... (11, 14)       | ⑩ AC inlet (AC IN)..... (5, 17)          |
| ③ PRE OUT connectors..... (6, 41, 42, 43, 45) | ⑪ HDMI connectors..... (3, 8)            |
| ④ S-VIDEO/VIDEO connectors..... (10, 11, 12)  | ⑫ Digital audio connectors..... (10, 11) |
| ⑤ COMPONENT VIDEO connectors..... (11)        | ⑬ ETHERNET connector..... (15)           |
| ⑥ BALANCED IN connectors..... (14)            | ⑭ REMOTE CONTROL jacks..... (16)         |
| ⑦ Input level selector..... (14)              | ⑮ DOCK CONTROL jack..... (12)            |
| ⑧ Output level selector..... (16)             | ⑯ BALANCED OUT connectors..... (12)      |

**NOTE**

Do not touch the inner pins of the connectors on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

# Remote control unit

For buttons not explained here, see the page indicated in parentheses ( ).



- 1 ZONE SELECT button ..... (52, 82)
- 2 Zone mode indicators ..... (82)
- 3 Input source select buttons ..... (19, 52)
- 4 QUICK SELECT buttons ..... (49, 53)
- 5 AMP button ..... (82)
- 6 Channel buttons (CH +, -) ..... (83, 86, 87)
- 7 Muting button (MUTE) ..... (20, 52)
- 8 MENU button ..... (59)
- 9 Cursor buttons (▲▼◀▶) ..... (56, 57, 59)
- 10 SEARCH button ..... (21, 23)
- 11 System buttons ..... (22, 24, 29, 32, 86, 87)
  - Search buttons (◀◀, ▶▶)
  - Skip buttons (◀◀, ▶▶)
  - Play button (▶)
  - Pause button (⏸)
  - Stop button (■)
- 12 Character buttons ..... (57)
- 13 MEMORY button ..... (27)
- 14 Number buttons ..... (83, 84, 86, 87)
- 15 SHIFT button ..... (57)
- 16 TV operation buttons (TV I/O / INPUT) ..... (86, 87)
- 17 Remote control signal transmitter ..... (115)
- 18 Power buttons (ON / STANDBY) ..... (5)
- 19 SOURCE SELECT button ..... (19)
- 20 Master volume control buttons (▲▼) ..... (20, 52)
- 21 Channel level button (CH LEVEL) ..... (48)
- 22 RETURN button (↩) ..... (59)
- 23 ENTER button ..... (56, 57, 59)
- 24 Surround mode buttons ..... (33)
  - MOVIE button
  - MUSIC button
  - GAME button
  - DIRECT button
- 25 SLEEP button ..... (47, 53)
- 26 Zone/Device power buttons (ZONE/DEVICE I/O) ..... (52, 86, 87)

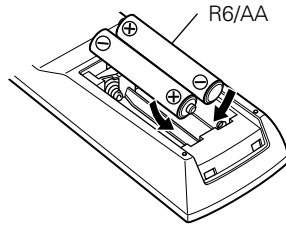
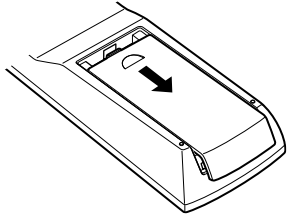
## NOTE

The **DVR**, **TUNER**, **PHONO**, **PARTY**, **INTERNET RADIO** and **PRESET 1 – 3** buttons cannot be used.



## Inserting the batteries

- ① Slide the rear lid in the direction of the arrow and remove it.
- ② Load the two batteries properly as indicated by the marks in the battery compartment.



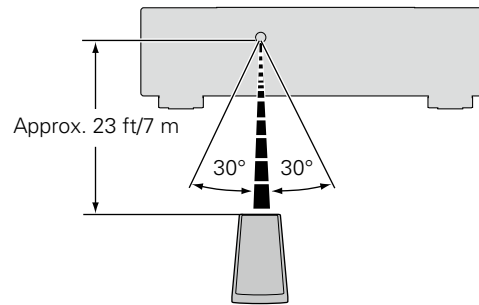
- ③ Put the rear cover back on.

### NOTE

- Insert the specified batteries in the remote control unit.
- Replace the batteries with new ones if the set does not operate even when the remote control unit is operated close to the unit. (The supplied batteries are only for verifying operation.)
- When inserting the batteries, be sure to do so in the proper direction, following the ⊕ and ⊖ marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
  - Do not use a new battery together with an old one.
  - Do not use two different types of batteries.
  - Do not attempt to charge dry batteries.
  - Do not short-circuit, disassemble, heat or dispose of batteries in flames.
  - Do not keep the battery in a place exposed to direct sunlight or in places with extremely high temperatures, such as near a heater.
- If the battery fluid should leak, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.
- Remove the batteries from the remote control unit if it will not be in use for long periods.
- Used batteries should be disposed of in accordance with the local regulations regarding battery disposal.
- The remote control unit may function improperly if rechargeable batteries are used.

## Operating range of the remote control unit

Point the remote control unit at the remote sensor when operating it.



### NOTE

- The set may function improperly or the remote control unit may not operate if the remote control sensor is exposed to direct sunlight, strong artificial light from an inverter type fluorescent lamp or infrared light.
- When using 3D video devices that transmit radio communication signals (such as infrared signals etc) between the various units (such as the monitor, 3D glasses, 3D transmitter unit etc), the remote control unit may not operate due to interference from those radio communication signals. If this occurs, adjust the direction and distance of the 3D communication for each unit, and check that the remote control unit operation is not affected by these signals.

# Other information

- ❑ **Trademark information** ([page 116](#))
- ❑ **Surround** ([page 117](#))
- ❑ **Relationship between video signals and monitor output** ([page 121](#))
- ❑ **Explanation of terms** ([page 122](#))

## Trademark information

This product uses the following technologies:



Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.



Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535; 7,212,872; 7,333,929; 7,392,195; 7,272,567 & other U.S. and worldwide patents issued & pending. DTS and the Symbol are registered trademarks, & DTS-HD, DTS-HD Master Audio, and the DTS logos are trademarks of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.



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"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, or iPhone, may affect wireless performance.

iPhone, iPod, iPod classic, iPod nano, iPod shuffle, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. iPad is a trademark of Apple Inc.

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# Surround

This unit is equipped with a digital signal processing circuit that lets you play program sources in the surround mode to achieve the same sense of presence as in a movie theater.

## Surround modes and surround parameters

This table shows the speakers that can be used in each surround mode and the surround parameters adjustable in each surround mode.

### Symbols in the table

- This indicates the audio output channels or surround parameters that can be set.
- ◎ This indicates the audio output channels. The output channels depend on the settings of "Speaker Config." (page 65).

Surround mode (page 33)	Channel output						Surr.Parameter (page 60)							
	Front L/R	Center	Surround L/R	Surround Back L/R	Front Height L/R	Subwoofer	Mode (page 60)	Cinema EQ. (page 60)	DRC *9 (page 60)	D. Comp *10 (page 60)	LFE *11 (page 60)	Delay Time (page 60)	Effect Level (page 60)	Room Size (page 60)
DIRECT/PURE DIRECT (2channel)*1	○					◎*4			○	○				
DIRECT/PURE DIRECT (Multi-channel)*1	○	◎	◎	◎*2	◎*2	◎			○	○	○			
STEREO	○					◎			○	○	○			
MULTI CH IN	○	◎	◎	◎	◎*3	◎		◎*6			○			
DOLBY PRO LOGIC IIz	○	◎	◎		◎	◎	◎*5	○	○	○				
DOLBY PRO LOGIC IIx	○	◎	◎	◎		◎	○	◎*8	○	○				
DOLBY PRO LOGIC II	○	◎	◎			◎	○	◎*7	○	○				
DTS NEO:6	○	◎	◎	◎		◎	○	◎*8	○	○				
DOLBY DIGITAL	○	◎	◎	◎	◎*3	◎		◎*6		○	○			
DOLBY DIGITAL Plus	○	◎	◎	◎	◎*3	◎		◎*6		○	○			
DOLBY TrueHD	○	◎	◎	◎	◎*3	◎		◎*6	○		○			
DTS SURROUND	○	◎	◎	◎	◎*3	◎		◎*6			○			
DTS 96/24	○	◎	◎	◎	◎*3	◎		◎*6			○			
DTS-HD	○	◎	◎	◎	◎*3	◎		◎*6			○			
DTS Express	○	◎	◎	◎	◎*3	◎		◎*6			○			
MULTI CH STEREO	○	◎	◎	◎	◎	◎			○	○	○			
ROCK ARENA	○	◎	◎	◎	◎	◎			○	○	○		○	○
JAZZ CLUB	○	◎	◎	◎	◎	◎			○	○	○		○	○
MONO MOVIE	○	◎	◎	◎	◎	◎			○	○	○		○	○
VIDEO GAME	○	◎	◎	◎	◎	◎			○	○	○		○	○
MATRIX	○	◎	◎	◎	◎	◎			○	○	○	○		
VIRTUAL	○					◎			○	○	○	○		

- \*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
- \*2 A signal for each channel contained in an input signal is output as audio.
- \*3 If "Surr.Parameter" – "PLIIz Height" (page 61) is set to "ON", sound is output from the front height speakers.
- \*4 Only when "Subwoofer Mode" is set to "LFE+Main" (page 66), sound is output from the subwoofer.
- \*5 If this surround mode is selected, only the "Height" mode setting is available for "Surr.Parameter" – "Mode" (page 60).
- \*6 This item cannot be set when "Surr.Parameter" – "S.Back" (page 61) is set to "PLIIx Music".
- \*7 This item can be selected when "Surr.Parameter" – "Mode" (page 60) is set to "Cinema" or "Pro Logic".
- \*8 This item can be selected when "Surr.Parameter" – "Mode" (page 60) is set to "Cinema".
- \*9 This item can be selected when a Dolby TrueHD signal is played.
- \*10 This item can be selected when a Dolby Digital or DTS signal is played.
- \*11 This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.

Surround mode (page 33)	Surr.Parameter (page 60)									Tone (page 62)	RESTORER *16 (page 62)
	Height Gain (page 61)	PLIIz Height*13 (page 61)	AFDM*14 (page 61)	S.Back (page 61)	Subwoofer (page 61)	PRO LOGIC II/IIx Music mode only			NEO:6 Music mode only		
						Panorama (page 60)	Dimension (page 60)	C.Width (page 60)	C.Image (page 60)		
DIRECT/PURE DIRECT (2channel)*1					○*4						
DIRECT/PURE DIRECT (Multi-channel)*1											
STEREO										○	○
MULTI CH IN	○*12	○								○	
DOLBY PRO LOGIC IIz	○	○								○	○
DOLBY PRO LOGIC IIx				○		○	○	○		○	○
DOLBY PRO LOGIC II				○		○	○	○		○	○
DTS NEO:6				○					○	○	○
DOLBY DIGITAL	○*12	○	○	○						○	
DOLBY DIGITAL Plus	○*12	○	○	○						○	
DOLBY TrueHD	○*12	○	○	○						○	
DTS SURROUND	○*12	○	○	○						○	
DTS 96/24	○*12	○	○	○						○	
DTS-HD	○*12	○	○	○						○	
DTS Express	○*12	○		○						○	
MULTI CH STEREO										○	○
ROCK ARENA										○*15	○
JAZZ CLUB										○	○
MONO MOVIE										○	○
VIDEO GAME										○	○
MATRIX										○	○
VIRTUAL										○	○

- \*1 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
- \*4 Only when "Subwoofer Mode" is set to "LFE+Main" (page 66), sound is output from the subwoofer.
- \*12 This item can be selected when "Surr.Parameter" - "PLIIz Height" (page 61) is set to "ON".
- \*13 If "Speaker Config." - "F.Height" (page 66) is set to "None", this item cannot be selected.
- \*14 This item can be selected when a Dolby Digital or DTS signal is played.
- \*15 In this surround mode, bass is +6 dB, and treble is +4 dB. (Default)
- \*16 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.

### Types of input signals, and corresponding surround modes

This table shows the input signal that can be played in each surround mode. Check the audio signal of the input source then select the surround mode.

#### Symbols in the table

- This indicates the default surround mode.
- ⊙ This indicates the surround mode that is fixed when "AFDM" (page 61) is set to "ON".
- This indicates the selectable surround mode.

Surround mode (page 33)	NOTE	Input signal types and formats															
		ANALOG	PCM		DTS-HD		DTS					DOLBY		DOLBY DIGITAL			
			PCM (multi ch)	PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1/5/4ch/3ch)	DOLBY DIGITAL (2ch)
<b>DTS SURROUND</b>																	
DTS-HD MSTR					●												
DTS-HD HI RES						●											
DTS ES DSCRT6.1	*1*3							●									
DTS ES MTRX6.1	*1*3								●	⊙							
DTS SURROUND									○	○							
DTS 96/24											●						
DTS (-HD) + PLIIx CINEMA	*2*3				○	○		○		○	○						
DTS (-HD) + PLIIx MUSIC	*1*3				○	○		○		○	○						
DTS (-HD) + PLIIz	*4				○	○		○		○	○						
DTS EXPRESS								●									
DTS (-HD) + NEO:6	*1*3				○	○		○		○	○						
DTS NEO:6 CINEMA		○		○												○	
DTS NEO:6 MUSIC		○		○												○	
<b>DOLBY SURROUND</b>																	
DOLBY TrueHD													●				
DOLBY DIGITAL+														●			
DOLBY DIGITAL EX	*1*3													○	○	○	
DOLBY (D+) (HD) +EX	*1*3												○	○			
DOLBY DIGITAL														○	●	●	
DOLBY (D) (D+) (HD) +PLIIx CINEMA	*2*3												○	○	○	○	
DOLBY (D) (D+) (HD) +PLIIx MUSIC	*1*3												○	○	○	○	
DOLBY (D) (D+) (HD) +PLIIz	*4												○	○	○	○	
DOLBY PRO LOGIC IIx CINEMA	*1*3	○		○												○	
DOLBY PRO LOGIC IIx MUSIC	*1*3	○		○												○	
DOLBY PRO LOGIC IIx GAME	*1*3	○		○												○	
DOLBY PRO LOGIC IIz	*4	○		○												○	
DOLBY PRO LOGIC II CINEMA		○		○												○	
DOLBY PRO LOGIC II MUSIC		○		○												○	
DOLBY PRO LOGIC II GAME		○		○												○	
DOLBY PRO LOGIC		○		○												○	

- \*1 If "Speaker Config." - "S.Back" (page 65) is set to "None", this surround mode cannot be selected.
- \*2 If "Speaker Config." - "S.Back" (page 65) is set to "1spkr" or "None", this surround mode cannot be selected.
- \*3 This surround mode can be selected when "Amp Assign" (page 65) is set to "NORMAL".
- \*4 If "Speaker Config." - "F.Height" (page 66) is set to "None", this surround mode cannot be selected.

Surround mode (page 33)	NOTE	Input signal types and formats																
		ANALOG	PCM		DTS-HD		DTS					DOLBY		DOLBY DIGITAL				
			PCM (multi ch)	PCM (2ch)	DTS-HD Master Audio	DTS-HD High Resolution Audio	DTS EXPRESS	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1/5/4ch/3ch)	DOLBY DIGITAL (2ch)	
MULTI CH IN																		
MULTI CH IN			●															
MULTI CH IN + PLIIx CINEMA	*2*3		○															
MULTI CH IN + PLIIx MUSIC	*1*3		○															
MULTI CH IN + PLIIz	*4		○															
MULTI CH IN + Dolby EX	*1*3		○															
MULTI CH IN 7.1	*3		●◎ (7.1)															
DIRECT																		
DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
PURE DIRECT																		
PURE DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
DSP SIMULATION																		
MULTI CH STEREO		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
ROCK ARENA		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
JAZZ CLUB		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MONO MOVIE		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VIDEO GAME		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MATRIX		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
VIRTUAL		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
STEREO																		
STEREO		●	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○

- \*1 If "Speaker Config." - "S.Back" (page 65) is set to "None", this surround mode cannot be selected.
- \*2 If "Speaker Config." - "S.Back" (page 65) is set to "1spkr" or "None", this surround mode cannot be selected.
- \*3 This surround mode can be selected when "Amp Assign" (page 65) is set to "NORMAL".
- \*4 If "Speaker Config." - "F.Height" (page 66) is set to "None", this surround mode cannot be selected.

## Relationship between video signals and monitor output

Input connector				Output connector			Menu displayed		
HDMI	COMPONENT	S-VIDEO	VIDEO	HDMI	COMPONENT	VIDEO	HDMI	COMPONENT	VIDEO
×	×	×	×	×	×	×	Only the menu is displayed	×	×
×	×	×	○	○ <VIDEO>	×	○ <VIDEO>	○ (VIDEO)	×	× (VIDEO)
×	×	○	×	○ <S-VIDEO>	×	○ <S-VIDEO>	○ (S-VIDEO)	×	× (S-VIDEO)
×	○	×	×	○ <COMPONENT>	○ <COMPONENT>	×	○ (COMPONENT)	× (COMPONENT)	×
×	○	×	○	○ <COMPONENT>	○ <COMPONENT>	○ <VIDEO>	○ (COMPONENT)	× (COMPONENT)	× (VIDEO)
×	○	○	×	○ <COMPONENT>	○ <COMPONENT>	○ <S-VIDEO>	○ (COMPONENT)	× (COMPONENT)	× (S-VIDEO)
○	×	×	×	○ <HDMI>	×	×	○ (HDMI)	×	×
○	×	×	○	○ <HDMI>	×	○ <VIDEO>	○ (HDMI)	×	× (VIDEO)
○	×	○	×	○ <HDMI>	×	○ <S-VIDEO>	○ (HDMI)	×	× (S-VIDEO)
○	○	×	×	○ <HDMI>	○ <COMPONENT>	×	○ (HDMI)	× (COMPONENT)	×
○	○	×	○	○ <HDMI>	○ <COMPONENT>	○ <VIDEO>	○ (HDMI)	× (COMPONENT)	× (VIDEO)
○	○	○	×	○ <HDMI>	○ <COMPONENT>	○ <S-VIDEO>	○ (HDMI)	× (COMPONENT)	× (S-VIDEO)

○ : Video signal input present  
 × : No video signal input

○ <>: The input signal between the < > marks is output.  
 × : No video signal output

○ ( ) : Superimposed on the picture indicated in ( ).  
 × ( ) : Only the picture in ( ) is output.  
 × : Neither the picture nor the menu is output.



The main zone video conversion function is compatible with the following formats: NTSC, PAL, SECAM, NTSC4.43, PAL-N, PAL-M and PAL-60.

### NOTE

- If you operate the menu while playing back 3D video content or computer's resolution (e.g. VGA), the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
- This unit does not show the status display while playing back 3D video content or computer's resolution (e.g. VGA).

## Explanation of terms

### A

#### **Adobe RGB color, Adobe YCC601 color**

Like “x.v.Color”, each of these color spaces defines a palette of available colors that is larger than the traditional RGB color model.

#### **Auto Lip Sync**

If you connect the unit to a TV that supports the Auto Lip Sync function, it can automatically correct delay between the audio and video.

### D

#### **Deep Color**

This technology allows expression of more number of colors than the conventional 8 bits and can reproduce colors close to natural ones without color streak.

#### **Dolby Digital**

Dolby Digital is a multi-channel digital signal format developed by Dolby Laboratories.

A total of 5.1 channels are played: 3 front channels (“FL”, “FR” and “C”), 2 surround channels (“SL” and “SR”) and the “LFE” channel for low frequencies.

Because of this, there is no crosstalk between channels and a realistic sound field with a “three-dimensional” feeling (sense of distance, movement and positioning) is achieved.

A realistic, powerful sense of presence is achieved when playing movie sources in AV rooms as well.

#### **Dolby Digital EX**

Dolby Digital EX is a 6.1-channel surround format proposed by Dolby Laboratories that allows users to enjoy in their homes the “DOLBY DIGITAL SURROUND EX” audio format jointly developed by Dolby Laboratories and Lucas Films.

The 6.1 channels of sound, including surround back channels, provide improved sound positioning and expression of space.

#### **Dolby Digital Plus**

Dolby Digital Plus is an improved Dolby Digital signal format that is compatible with up to 7.1 channels of discrete digital sound and also improves sound quality thanks to extra data bit rate performance. It is upwardly compatible with conventional Dolby Digital, so it offers greater flexibility in response to the source signal and the conditions of the playback device.

#### **Dolby Pro Logic II**

Dolby Pro Logic II is a matrix decoding technology developed by Dolby Laboratories.

Regular music such as that on CDs is encoded into 5 channels to achieve an excellent surround effect. The surround channel signals are converted into stereo and full band signals (with a frequency response of 20 Hz to 20 kHz or greater) to create a “three-dimensional” sound image offering a rich sense of presence for all stereo sources.

#### **Dolby Pro Logic IIx**

Dolby Pro Logic IIx is a further improved version of the Dolby Pro Logic II matrix decoding technology. Audio signals recorded in 2 channels are decoded to achieve a natural sound with up to 7.1 channels. There are three modes: “Music” suited for playing music, “Cinema” suited for playing movies, and “Game” which is optimized for playing games.

#### **Dolby Pro Logic IIz**

Dolby Pro Logic IIz introduces a new dimension to Home Entertainment through the addition of a pair of front height channels. Compatible with stereo, 5.1-channel and 7.1-channel content, Dolby Pro Logic IIz provides enhanced spaciousness, depth and dimension to movies, concert video and video game playback while maintaining the full integrity of the source mix.

Dolby Pro Logic IIz identifies and decodes spatial cues that occur naturally in all content, directing this information to the front height channels, complementing the performance of left and right surround sound speakers. Content that is encoded with Dolby Pro Logic IIz height channel information can be even more revealing, with perceptually discrete height channel information bringing an exciting new dimension to home entertainment. Dolby Pro Logic IIz, with front height channels is also an ideal alternative for households that cannot support the placement of back surround speakers of a typical 7.1-channel system but may have bookshelf space available to support the addition of height speakers.

#### **Dolby TrueHD**

Dolby TrueHD is a high definition audio technology developed by Dolby Laboratories, using lossless coding technology to faithfully reproduce the sound of the studio master.

This format provides the facility to support up to 8 audio channels with a sampling frequency of 96 kHz/24 bit resolution and up to 6 audio channels with a sampling frequency of 192 kHz/24 bit resolution. Dolby TrueHD is adopted for applications that put very high importance on sound quality.

#### **Downmix**

This function converts the number of channels of surround audio to less number of channels and plays back.

#### **DTS**

This is an abbreviation of Digital Theater System, which is a digital audio system developed by DTS. When playing back audio by connecting this system with a device such as DTS amplifier, accurate sound field position and realistic sound effect as if you are in a movie theater can be obtained.

#### **DTS 96/24**

DTS 96/24 is a digital audio format enabling high sound quality playback in 5.1 channels with a sampling frequency of 96 kHz and 24 bit quantization on DVD-Video.

#### **DTS Digital Surround**

DTS Digital Surround is the standard digital surround format of DTS, Inc., compatible with a sampling frequency of 44.1 or 48 kHz and up to 5.1 channels of digital discrete surround sound.

#### **DTS-ES™ Discrete 6.1**

DTS-ES™ Discrete 6.1 is a 6.1-channel discrete digital audio format adding a surround back (SB) channel to the DTS digital surround sound.

Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

#### **DTS-ES™ Matrix 6.1**

DTS-ES™ Matrix 6.1 is a 6.1-channel discrete digital audio format inserting a surround back (SB) channel to the DTS digital surround sound through matrix encoding. Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

#### **DTS Express**

DTS Express is an audio format supporting low bit rates (max. 5.1 channels, 24 to 256 kbps).

#### **DTS-HD**

This audio technology provides higher sound quality and enhanced functionality than the conventional DTS and is adopted as an optional audio for Blu-ray Disc. This technology supports multi-channel, high data transfer speed, high sampling frequency, and lossless audio playback. Maximum 7.1-channels are supported in Blu-ray Disc.

#### **DTS-HD High Resolution Audio**

DTS-HD High Resolution Audio is an improved version of the conventional DTS, DTS-ES and DTS 96/24 signals formats, compatible with sampling frequencies of 96 or 48 kHz and up to 7.1 channels of discrete digital sound. High data bit rate performance provides high quality sound. This format is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

#### **DTS-HD Master Audio**

DTS-HD Master Audio is a lossless audio format created by Digital Theater System (DTS). This format provides the facility to support up to 8 audio channels with a sampling frequency of 96 kHz/24 bit resolution and up to 6 audio channels with a sampling frequency of 192 kHz/24 bit resolution. It is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

#### **DTS NEO:6™ Surround**

DTS NEO:6™ is a matrix decoding technology for achieving 6.1-channel surround playback with 2-channel sources. It includes “DTS NEO:6 Cinema” suited for playing movies and “DTS NEO:6 Music” suited for playing music.

#### **Dynamic range**

The difference between the maximum undistorted sound level and the minimum discernible level above the noise emitted by the device.



**F****FLAC**

FLAC stands for Free lossless Audio Codec, and is a lossless free audio file format. Lossless means that the audio is compressed without any loss in quality. The FLAC license is as shown below.

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**H****HDCP**

When transmitting digital signals between devices, this copyright protection technology encrypts the signals to prevent content from being copied without authorization.

**HDMI**

This is an abbreviation of High-Definition Multimedia Interface, which is an AV digital interface that can be connected to a TV or amplifier. Video signal and audio signal can be connected using 1 cable.

**I****iTunes**

iTunes is the name of the multimedia player provided by Apple Inc. It enables management and playback of multimedia contents including music and movies. iTunes supports many main file formats including AAC, WAV, and MP3.

**L****LFE**

This is an abbreviation of Low Frequency Effect, which is an output channel that emphasizes low frequency effect sound. Surround audio is intensified by outputting 20 Hz to 120 Hz deep bass.

**M****MAIN ZONE**

The room where this unit is placed is called the MAIN ZONE .

**MP3 (MPEG Audio Layer-3)**

This is an internationally standardized audio data compression scheme, using the "MPEG-1" video compression standard. It compresses the data volume to about one eleventh its original size while maintaining sound quality equivalent to a music CD.

**MPEG (Moving Picture Experts Group), MPEG-2, MPEG-4**

These are the names for digital compression format standards used for the encoding of video and audio. Video standards include "MPEG-1 Video", "MPEG-2 Video", "MPEG-4 Visual", "MPEG-4 AVC". Audio standards include "MPEG-1 Audio", "MPEG-2 Audio", "MPEG-4 AAC".

**P****Progressive (sequential scanning)**

This is a scanning system of video signal that displays 1 frame of video as one image. Compared to the interlace system, this system provides images with less flickering and bleeding.

**S****Sampling frequency**

Sampling involves taking a reading of a sound wave (analog signal) at regular intervals and expressing the height of the wave at each reading in digitized format (producing a digital signal).

The number of readings taken in one second is called the "sampling frequency". The larger the value, the closer the reproduced sound is to the original.

**sYCC601 color**

Like "x.v.Color", each of these color spaces defines a palette of available colors that is larger than the traditional RGB color model.

**W****Windows Media DRM**

This is a copyright protection technology developed by Microsoft.

Content providers are using the digital rights management technology for Windows Media contained in this device (WM-DRM) to protect the integrity of their content (Secure Content) so that their intellectual property, including copyright, in such content is not misappropriated. This device uses WM-DRM software to play Secure Content (WM-DRM Software). If the security of the WM-DRM Software in this device has been compromised, owners of Secure Content (Secure Content Owners) may request that Microsoft revoke the WM-DRM Software's right to acquire new licenses to copy, display and/or play Secure Content. Revocation does not alter the WM-DRM Software's ability to play unprotected content. A list of revoked WM-DRM Software is sent to your device whenever you download a license for Secure Content from the Internet or from a PC. Microsoft may, in conjunction with such license, also download revocation list onto your device on behalf of Secure Content Owners.

**Windows Media Player Ver.11 or later**

This is a media player distributed free of charge by Microsoft Corporation.

It can play playlists created with Ver.11 or later of Windows Media Player, as well as WMA, DRM WMA, WAV, and other files.

**WMA (Windows Media Audio)**

This is audio compression technology developed by Microsoft Corporation.

WMA data can be encoded using Windows Media® Player Ver.7, 7.1, Windows Media® Player for Windows® XP and Windows Media® Player 9 Series.

To encode WMA files, only use applications authorized by Microsoft Corporation. If you use an unauthorized application, the file may not work properly.

## Explanation of terms

### X

#### **x.v.Color**

This function lets HDTVs display colors more accurately. It enables display with natural, vivid colors. "x.v.Color" is a Sony registered trademark.

### Z

#### **ZONE2**

This unit can operate in a room other than the room where this unit is placed (MAIN ZONE) (ZONE2 playback). The room for ZONE2 playback is called ZONE2.

# Troubleshooting

If a problem should arise, first check the following:

**1. Are the connections correct?**

**2. Is the set being operated as described in the owner's manual?**


**3. Are the other devices operating properly?**

If this unit does not operate properly, check the items listed in the table below.

If the symptom is not covered on the check list, contact your dealer or service centers.

Service centers are listed at <http://www.d-mpro.com>.



## [General]

Symptom	Cause/Solution	Page
Power does not turn on.	<ul style="list-style-type: none"> <li>Check whether the power plug is correctly inserted into the power outlet.</li> </ul>	 5
Display is off.	<ul style="list-style-type: none"> <li>Set "Dimmer" on the menu to something other than "OFF".</li> </ul>	<a href="#">74</a>
The power indicator is blinking red in intervals of approximately 2 seconds.	<ul style="list-style-type: none"> <li>The temperature inside the unit has risen. Please turn off power once, and re-apply the power after the temperature has fallen sufficiently.</li> <li>Please re-install this unit in a place having good ventilation.</li> </ul>	–
After turning on the power, the power indicator is blinking red in intervals of approximately 0.5 seconds.	<ul style="list-style-type: none"> <li>The unit's pre-amplifier circuit has failed. Turn off the power and please contact the D&amp;M Professional service adviser.</li> </ul>	–
Set does not operate properly.	<ul style="list-style-type: none"> <li>Reset the microprocessor.</li> </ul>	<a href="#">128</a>




## [HDMI]

Symptom	Cause/Solution	Page
No audio is output with HDMI connection.	<ul style="list-style-type: none"> <li>Check the connection of the HDMI connectors.</li> <li>When outputting HDMI audio from the speakers, set "HDMI Audio Out" on the menu to "AMP".</li> <li>When outputting HDMI audio from a TV, set "HDMI Audio Out" on the menu to "TV".</li> </ul>	<a href="#">8</a> <a href="#">68</a> <a href="#">68</a>
No video is output with HDMI connection.	<ul style="list-style-type: none"> <li>Check the connection of the HDMI connectors.</li> <li>Set the input source to match the connected HDMI connector.</li> <li>Check whether the TV is compatible with copyright protection (HDCP). If connected to a device not compatible with HDCP, video will not be output correctly.</li> </ul>	<a href="#">8</a> <a href="#">8, 19</a> <a href="#">7</a>
When the following operations are performed on devices compatible with HDMI control, the same operations occur on this unit. <ul style="list-style-type: none"> <li>Power ON/OFF</li> <li>Switching audio output devices</li> <li>Adjust volume</li> <li>Switch input source</li> </ul>	<ul style="list-style-type: none"> <li>Set "HDMI Control" in the menu to "OFF".</li> </ul> <p>Furthermore, if you do not want to link the power off operation with devices compatible with HDMI control, set "P.Off Control" in the menu to "OFF".</p>	<a href="#">46, 68</a>

## [Video]

Symptom	Cause/Solution	Page
No picture appears.	<ul style="list-style-type: none"> <li>Check the TV connection.</li> <li>Set the TV input correctly.</li> </ul>	 3  3

**[Audio]**

Symptom	Cause/Solution	Page
Audio is not output.	<ul style="list-style-type: none"> <li>• Check the connections for all devices.</li> <li>• Check the speaker connections and configurations.</li> <li>• Check whether the audio device power is turned on.</li> <li>• Adjust the master volume.</li> <li>• Cancel the mute mode.</li> <li>• Select a suitable input source.</li> <li>• Select a suitable input mode.</li> </ul>	<p> <a href="#">3</a>, <a href="#">8</a>, <a href="#">10</a>, <a href="#">11</a>, <a href="#">12</a>, <a href="#">15</a></p> <p> <a href="#">6</a>, <a href="#">41</a>, <a href="#">42</a>, <a href="#">43</a>, <a href="#">45</a></p> <p>– <a href="#">20</a>, <a href="#">52</a> <a href="#">20</a>, <a href="#">52</a> <a href="#">19</a>, <a href="#">52</a> <a href="#">80</a></p>
No sound is produced from surround speaker.	<ul style="list-style-type: none"> <li>• Check if the surround output terminals are connected to the power amplifier and speakers.</li> </ul>	–
No sound is produced from surround back speaker.	<ul style="list-style-type: none"> <li>• Check if “Amp Assign” is set appropriately in order to output audio from the surround back terminals.</li> <li>• Set “Speaker Config.” – “S.Back” on the menu to something other than “None”.</li> <li>• Set “Surr.Parameter” – “S.Back” on the menu to something other than “OFF”.</li> <li>• Set the surround mode to something other than “STEREO” and “VIRTUAL”.</li> </ul>	<p><a href="#">65</a></p> <p><a href="#">65</a></p> <p><a href="#">61</a></p> <p><a href="#">33</a></p>
No sound is produced from front height speaker.	<ul style="list-style-type: none"> <li>• Set “Surr.Parameter” – “PLIIz Height” on the menu to “ON”.</li> <li>• Check if “Amp Assign” is set appropriately in order to output audio from the front height speakers.</li> <li>• Set “Speaker Config.” – “F.Height” on the menu to something other than “None”.</li> </ul>	<p><a href="#">61</a></p> <p><a href="#">65</a></p> <p><a href="#">66</a></p>
No sound is produced from subwoofer.	<ul style="list-style-type: none"> <li>• Check the subwoofer connections.</li> <li>• Turn on the subwoofer’s power.</li> <li>• Set “Speaker Config.” – “Subwoofer” on the menu to “Yes”.</li> <li>• If “Front” and “Center” for “Speaker Config.” are set to “Large”, and “Subwoofer Mode” is set to “LFE”, no sound may be output from the subwoofers, depending on the input signal or selected surround mode.</li> </ul>	<p> <a href="#">6</a>, <a href="#">41</a>, <a href="#">42</a>, <a href="#">43</a>, <a href="#">45</a></p> <p>– <a href="#">65</a> <a href="#">65</a>, <a href="#">66</a></p>
DTS sound is not output.	<ul style="list-style-type: none"> <li>• Set “Decode Mode” on the menu to “Auto” or “DTS”.</li> </ul>	<a href="#">80</a>

Symptom	Cause/Solution	Page
Dolby TrueHD, DTS-HD, Dolby Digital Plus audio is not output.	<ul style="list-style-type: none"> <li>• Make HDMI connections.</li> </ul>	<a href="#">8</a>
Dolby PLII mode or DTS NEO:6 mode cannot be selected.	<ul style="list-style-type: none"> <li>• Check that “Speaker Config.” – “Center” or “Surround” is set to other than “None”. If the speaker system is 2.0/2.1ch, this surround mode cannot be selected.</li> <li>• When headphones are used, Dolby PLII or DTS NEO:6 cannot be selected.</li> </ul>	<p><a href="#">65</a></p> <p>–</p>
RESTORER cannot be selected.	<ul style="list-style-type: none"> <li>• Check that an analog signal or PCM signal (fs=44.1/48 kHz) is input. For playback of multichannel signals such as Dolby Digital or DTS surround, RESTORER cannot be used.</li> <li>• Switch the surround mode to other than “DIRECT” or “PURE DIRECT”.</li> </ul>	<p><a href="#">62</a></p> <p><a href="#">33</a></p>

**[Control dock for iPod]**

Symptom	Cause/Solution	Page
iPod cannot be played.	<ul style="list-style-type: none"> <li>• Check the iPod connections.</li> <li>• Insert the AC adaptor of the iPod control dock into the power outlet.</li> <li>• Switch the input source to “DOCK”.</li> </ul>	<p><a href="#">12</a></p> <p>–</p> <p><a href="#">19</a></p>

**[Media server / iPod / USB memory device]**

Symptom	Cause/Solution	Page
Music files are not played correctly.	<ul style="list-style-type: none"> <li>The size of the album artwork image registered to the music file is too large. The supported album art image size for WMA, MP3, WAV, and FLAC formats is 500 x 500 pixel or smaller. For m4a format, the supported image size is 349 x 349 pixel or smaller. If the image is larger than the supported size, the audio file may not be played correctly.</li> </ul>	–
When a USB memory device is connected, "USB" is not displayed on the menu.	<ul style="list-style-type: none"> <li>The set cannot recognize a USB memory device. Check the connection.</li> </ul>	<a href="#">13</a>
	<ul style="list-style-type: none"> <li>A USB memory device not conforming to mass storage class or MTP standards is connected. Connect a USB memory device conforming to mass storage class or MTP standards.</li> </ul>	–
	<ul style="list-style-type: none"> <li>A USB memory device that the set cannot recognize is connected. This is not a malfunction. D&amp;M Professional does not guarantee that all USB memory devices will operate or receive power.</li> </ul>	–
	<ul style="list-style-type: none"> <li>USB memory device is connected via USB hub. Connect the USB memory device directly to the USB port.</li> </ul>	–
Files on a USB memory device cannot be played.	<ul style="list-style-type: none"> <li>USB memory device is in format other than FAT16 or FAT32. Set the format to FAT16 or FAT32. For details, refer to the USB memory device's operating instructions.</li> </ul>	–
	<ul style="list-style-type: none"> <li>USB memory device is divided into multiple partitions. When divided into multiple partitions, only files stored in the top partition can be played.</li> </ul>	–
	<ul style="list-style-type: none"> <li>Files are stored in a non-compatible format. Record the files in a compatible format.</li> </ul>	<a href="#">30</a>
	<ul style="list-style-type: none"> <li>You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit.</li> </ul>	<a href="#">30</a>
The file names are not displayed properly ("...", etc.).	<ul style="list-style-type: none"> <li>Characters that cannot be displayed are used. This is not a malfunction. On this unit, characters that cannot be displayed are replaced with a "." (period).</li> </ul>	–
Files stored on a computer cannot be played.	<ul style="list-style-type: none"> <li>Files are stored in a non-compatible format. Record in a compatible format.</li> </ul>	<a href="#">26</a>
	<ul style="list-style-type: none"> <li>You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit.</li> </ul>	<a href="#">26</a>
	<ul style="list-style-type: none"> <li>Set and computer are connected by USB cable. The set's USB port cannot be used for connection to a computer.</li> </ul>	–
Server is not found, or it is not possible to connect to the server.	<ul style="list-style-type: none"> <li>The computer's or router's firewall is activated. Check the computer's or router's firewall settings.</li> </ul>	–
	<ul style="list-style-type: none"> <li>Computer's power is not turned on. Turn on the power.</li> </ul>	–
	<ul style="list-style-type: none"> <li>Server is not running. Launch the server.</li> </ul>	–
	<ul style="list-style-type: none"> <li>Set's IP address is wrong. Check the set's IP address.</li> </ul>	<a href="#">72</a>

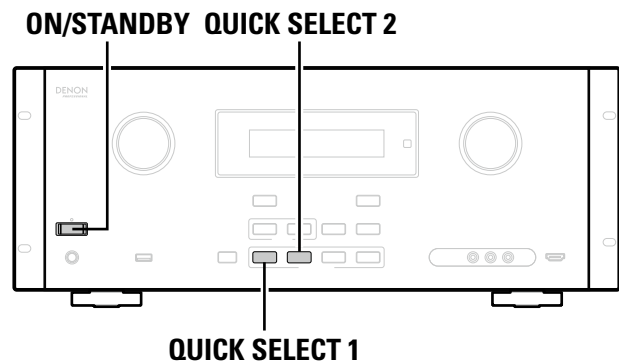
Symptom	Cause/Solution	Page
iPod cannot be played.	<ul style="list-style-type: none"> <li>Some iPods do not support being used connected directly to the USB port.</li> <li>Cable is not properly connected. Reconnect.</li> <li>The iPod is connected to this unit using an iPod cable (commercially available) that is longer than 2 m (6.6 ft). Use a genuine cable or iPod cable that is shorter than 1 m (3.3 ft) to connect the iPod to this unit.</li> </ul>	<a href="#">13</a> <a href="#">13</a> <a href="#">13</a>
Sound is broken during playback.	<ul style="list-style-type: none"> <li>Network's signal transfer speed is slow or communications lines or radio station is congested. This is not a malfunction. When playing broadcast data with a high bit rate, the sound may be broken, depending on the communications conditions.</li> </ul>	–
Sound quality is poor or played sound is noisy.	<ul style="list-style-type: none"> <li>File being played has a low bit rate. This is not a malfunction.</li> </ul>	–
Cannot compile Playlist.	<ul style="list-style-type: none"> <li>This unit does not respond to playlist compilation. When the playlist is compiled in PC Application, it is registered to "My Library". In this way, the playlist can be played in this unit</li> </ul>	–
Cannot delete Tracks, Playlists, Channels registered in "My Library"	<ul style="list-style-type: none"> <li>Cannot be done with this unit. Delete from PC Application.</li> </ul>	–

**[Remote control unit]**

Symptom	Cause/Solution	Page
The set cannot be operated with the remote control unit.	<ul style="list-style-type: none"> <li>Batteries are worn out. Replace with new batteries.</li> </ul>	<a href="#">115</a>
	<ul style="list-style-type: none"> <li>Operate the remote control unit within a distance of about 7 m from this unit and at an angle of within 30°.</li> </ul>	<a href="#">115</a>
	<ul style="list-style-type: none"> <li>Remove any obstacle between this unit and the remote control unit.</li> </ul>	<a href="#">115</a>
	<ul style="list-style-type: none"> <li>Insert the batteries in the proper direction, checking the ⊕ and ⊖ marks.</li> </ul>	<a href="#">115</a>
	<ul style="list-style-type: none"> <li>The set's remote control sensor is exposed to strong light (direct sunlight, inverter type fluorescent bulb light, etc.). Move the set to a place in which the remote control sensor will not be exposed to strong light.</li> </ul>	<a href="#">115</a>
	<ul style="list-style-type: none"> <li>The ZONE SELECT setting is not correct. Press <b>ZONE SELECT</b> to select the zone to operate.</li> </ul>	<a href="#">82</a>
	<ul style="list-style-type: none"> <li>The operation mode does not match the settings of the device to operate. Check the operation mode.</li> </ul>	<a href="#">82</a>

## Resetting the microprocessor

Perform this procedure if the display is abnormal or if operations cannot be performed. When the microprocessor is reset, all the settings are reset to their default values.



- 1** Turn off the power using **ON/STANDBY**.
- 2** Press **ON/STANDBY** while simultaneously pressing **QUICK SELECT 1** and **QUICK SELECT 2**.
- 3** Once the display starts flashing at intervals of about 1 second, release the two buttons.



If in step 3 the display does not flash at intervals of about 1 second, start over from step 1.

# Specifications

## □ Audio section

### • Analog

<b>Input sensitivity/Input impedance:</b>	RCA connectors : 200 mV/47 k $\Omega$ XLR connector : +4 dBu : 400 mV/4.3 k $\Omega$ -10 dBV : 100 mV/4.3 k $\Omega$
<b>Output level:</b>	+4 dBu : 318 mV -10 dBV : 80 mV
<b>Frequency response:</b>	10 Hz – 100 kHz — +1, -3 dB (DIRECT mode)
<b>S/N:</b>	100 dB (IHF-A weighted, DIRECT mode)
<b>Total harmonic distortion:</b>	0.01 %

## □ Video section

### • Standard video connectors

<b>Input/output level and impedance:</b>	1 V <sub>p-p</sub> , 75 $\Omega$
<b>Frequency response:</b>	5 Hz – 10 MHz — 0, -3 dB

## □ General

<b>Power supply:</b>	AC 120 V, 60 Hz (U.S.A and Canada models) AC 230 V, 50/60 Hz (European, U.K and Asia/Pacific models)
<b>Power consumption:</b>	35 W 0.2 W (Standby) 3 W (CEC standby)

For purposes of improvement, specifications and design are subject to change without notice.

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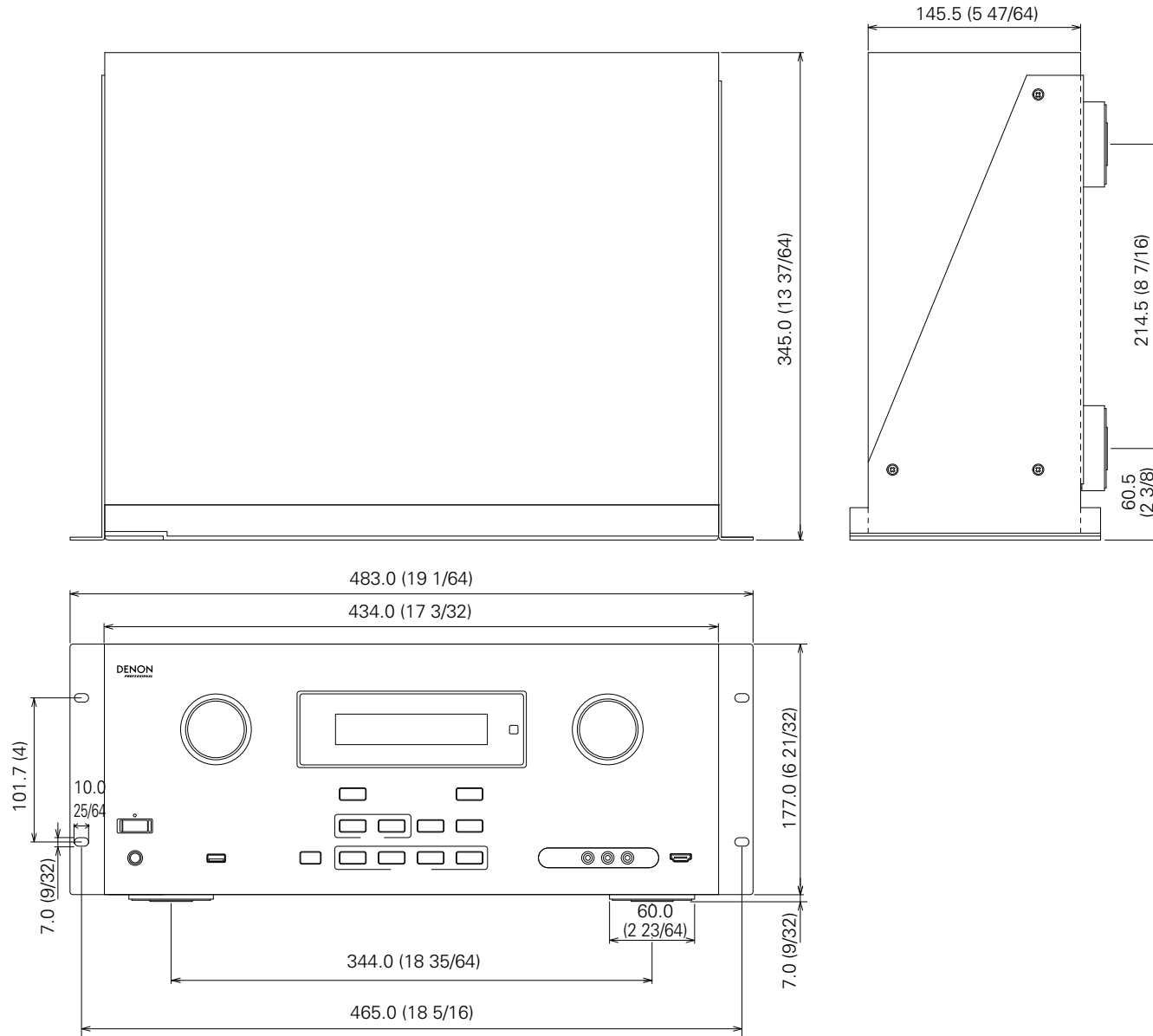
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# Dimensions

Unit : mm (in)



**Weight : 10.2 kg (2 lbs 4 oz)**

# D&M Holdings Inc.